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All systems 'go' for next phase of LCI, page 5

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**Exercise** tests SATCON Soldiers, page 23

# The Eagle Volume 11, Number 9, October 2004

United States Army Space and Missile Defense Command



Photo by Sgt. Sara Storey

# Force protection exercise challenges Fort Greely Soldiers

Security forces from Fort Greely, Alaska, guard the Missile Field Complex from an armed High Mobility Multi-purpose Wheeled Vehicle. See story page 23.

# Schexnayder announces **RDA** realignment

By Debra Valine Editor, The Eagle

**HUNTSVILLE**, **Ala**. — Michael Schexnayder, deputy to the commander for Research, Development and Acquisition (RDA), U.S. Army Space and Missile Defense Command, announced changes Sept. 16 to the RDA structure that will align the organization to better support its customers and mission.

The concept for the reorganization is being reviewed by the American Federation of Government Employees union, Local 1858, officials before going into effect Oct. 17. A series of town hall meetings explained the reorganization to employees.

The reorganization is necessary to position SMDC RDA for future growth. The proposed changes will not result in downsizing the work force. There is no requirement for physical movement of employees at this time.

"What I have been doing

since I got here is looking at a strategy to move this organization to a successful future," Schexnayder said. "We all work on a reimbursable basis. We get paid through the products we provide the customer. We will achieve a structural alignment to our mission and business base. The reason is to make us more successful as an organization and make us more valuable."

Under the reorganization concept, the Test and Evaluation Center will merge with the Technical Center; the Force Development and Integration Center will merge with the Battle Lab and become the Future Warfare Center; and the Office of Technical Integration and Interoperability will be renamed the Technical Interoperability and Matrix Center (TIMC). The TIMC mission will expand to include oversight of co-located program matrix employees from the Technical Center and RDA staff

See *Realignment*, page 21

# Technical Center using missile defense technology to further breast cancer research

By Debra Valine Editor, The Eagle

**HUNTSVILLE. Ala.** — Breast cancer.

Those are two words that can strike terror in your heart, especially if you are hearing them in the doctor's office.

Medical research into breast cancer has come a long way and today more women are surviving the disease because of early detection through yearly mammograms. But mammograms do not detect all breast cancers.

The U.S. Army Space and Missile Defense Command's Technical Center is investigating whether or not missile defense technology can be used to improve mammogram imagery.

At the 7th Annual Space and Missile Defense Conference Aug. 18 in Huntsville, Col. Craig Shriver from the Clinical Breast Care Project at Walter Reed Army Medical Center in Washington, D.C., told attendees that missile defense technology and breast cancer research terminology are surprisingly similar and that early results in the investigation look promising.

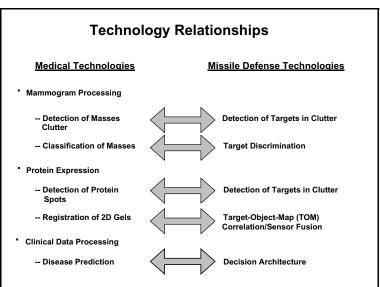
"When given a reading of 'abnormal," mammography has an error rate of more than 80 percent in predicting cancer accurately," Shriver said. Up

to 15 percent of known cancers are not seen on mammograms. Up to 80 percent of abnormalities that "need biopsy" are not cancer.

This means that a million people are going through surgeries or procedures to find the 200,000 with cancer. These 'unnecessary' biopsies when there is no cancer will cost the health care system \$4.2 billion. Even so, mammograms are the best tool we have right now. Therefore, we must do everything possible to

improve mammography," Shriver said. Working with SMDC, Shriver hopes to improve specificity in mammograms.

See *Cancer Research*, page 8



# **The Command Corner**



Lt. Gen. Larry J. Dodgen Commanding General

CSM David L. Lady Command Sergeant Major



he global security environment today is fundamentally different than anything we've faced as a nation in our 228-year history. We now face a wide range of threats from terrorism, to the use of weapons of mass destruction by rogue states and non-state actors, to the use of ballistic and cruise missiles against our homeland, our deployed forces, our friends and allies. Our adversaries have demonstrated the capability to use new, more lethal forms of threats.

The logic of the past that rational countries won't attack one another does not apply to these threats. Our adversaries are investing vast amounts of resources to recruit, train and equip young people who are indoctrinated with the belief that a peaceful coexistence with us, our friends and allies, is impossible and fundamentally wrong. They have studied and understand our capabilities and are striving to adapt their techniques to minimize their obvious disadvantage. Our potential adversaries are exerting tremendous energy to increase their ability to acquire the necessary technology to construct weapons of mass destruction, which might then be used as tools of aggression, extortion and coercion. The leaders of these rogue states and terrorist groups see weapons of mass destruction as weapons of choice, not as weapons of last resort.

The Army, just as it has since 1794 when coastal forts armed with artillery were constructed along our eastern shoreline, will provide the shield for the defense of our homeland, our deployed forces, our friends and allies. One year ago this month, the 100th Missile Defense Brigade was activated in Colorado Springs, Colo. Its mission is to operate the nation's groundbased midcourse defense system designed to dissuade and deter ballistic missile attacks. Less than one year later, the brigade, along with the 49th Missile Defense Battalion, activated at Fort Greely, Alaska, in January 2004, is ready to execute their missions. The Missile Defense Element and Fire Direction Center crews are trained and ready. The Soldiers providing security for the interceptor silos on Fort Greely and the installation are trained and ready. The military and civilian personnel associated with this system from the Missile Defense Agency, the U.S. Strategic Command, the U.S. Northern Command and the other services are trained and ready. Several of the interceptors planned for Fort Greely have been placed in their silos with more to be added later this year. This will provide a limited defense capability against a ballistic missile attack while simultaneously enabling the Department of Defense to conduct more rigorous testing. We have come a long way in a short time; however much remains to be done. I applaud each and every one of you for your commitment to one of this command's top priorities.

Another key accomplishment within the past month was the "stand up" of the first Space Support Element (SSE) organic to a warfighting division, specifically the 3rd Infantry Division at Fort Stewart, Ga. The Army is transforming and so are space forces along with it. In the near future, other Space Support Elements will be incorporated in the 10th Mountain Division and the 101st Airborne Division (Air Assault). This will ensure space forces are deployed in theater organic to the UEx and UEy (units of employment) — our future employment headquarters.

In the next few weeks, every American citizen age 18 and over will be able to cast a vote to elect the next president of the United States of America and our commander in chief. It is a right that defines our nation as a democracy. It is a right we often take for granted yet thousands of our fellow service members are deployed in harm's way to bring that right to the entire population of a former dictatorship. On the first Tuesday of November, please exercise this precious right and vote for your candidate of choice.

SECURE THE HIGH GROUND!

he linkage between Noncommissioned Officer Education System (NCOES) courses and enlisted promotions has recently been changed. Completing Primary Leadership Development Course is no longer required for promotion to sergeant; the Basic NCO Course is no longer required for promotion to staff sergeant; and the Advanced NCO Course is no longer required for promotion to sergeant first class. Instead of being prerequisites for promotion to the higher grade, these courses are now prerequisites for promotion to the next higher grade: PLDC for staff sergeant; BNCOC for sergeant first class; and ANCOC for master sergeant.

This change is because of the large number of Soldiers deployed into combat and other critical homeland defense missions. Our Soldiers serving in harm's way must not fear they are being disadvantaged versus their nondeployed peers when it comes to having opportunities for promotion and development. Commanders can select and promote their best specialists and sergeants while the units are deployed; the Army can abolish the complicated conditional promotion system.

The "Select, Train, Promote" paradigm of the past 20 years is no longer the rule. Even if the war against international terrorism ceased tomorrow, the paradigm would not be restored. All Army systems and programs must not only be changed to better support the Global War on Terrorism, but they must be changed to support the manning of 77 Modular Brigade Combat Teams (BCTs) that will comprise the Army's most significant contribution to our joint and expeditionary forces.

Because the Soldiers of these BCTs will serve in the units throughout a three-year life-cycle, and because the unit must be trained, certified and fully ready for deployment (if not engaged in combat) for at least half of this three-year period, opportunities to attend NCOES courses must be managed for the good of the unit; unit readiness and cohesion must take precedence over individual development. All Soldiers needing professional courses will probably attend them during the same period within the training cycle of a unit. The details of how this system will be managed are still being worked out.

As we know, nearly half of the Army will not be organized into BCTs. SMDC/ARSTRAT will remain outside of these organizations. This command will deploy small teams in support of the maneuver BCTs, but our unit manning cycle will be different. Our Soldiers should still have the opportunity to attend NCOES courses prior to promotion to the higher grade. The goal for SMDC/ARSTRAT Soldiers is to graduate PLDC prior to promotion to sergeant; BNCOC prior to promotion to staff sergeant; ANCOC prior to promotion to sergeant first class. Units are expected to pursue course dates aggressively. Only operational deployments are reason to defer healthy Soldiers from scheduled courses; no other reason is acceptable.

We do not need or want old sergeants who have not graduated PLDC; old staff sergeants who have not graduated BNCOC; and old sergeants first class who have not graduated ANCOC. NCOES courses create better sergeants; knowledge is power and practice makes perfect. There is very positive value to returning to the branch and regimental center, to renew the values and increase competence and confidence through tough, hands-on training conducted to doctrinal standards.

Commanders and the command sergeants major of this command are liable to the commanding general, the deputy commander, and to me to get all Soldiers with promotion potential to NCOES courses as soon as possible. Every Soldier's promotion potential and opportunity for NCOES attendance will be reviewed each month during mandatory counseling. NCOES attendance will continue to be a Quarterly Training Review topic.

Good leaders grow their own successors. NCOES is changing to make our successors much better than we have been; identify our best for professional schooling and promotion so that our successors will be in place when required.

On Point!

The Eagle ... is an authorized unofficial newspaper published for military and civilian members of the U.S. Army Space and Missile Defense Command published under the authority of AR 360-1. The editorial style applies the industry standard Associated Press Stylebook. Contents of The Eagle are not necessarily official views of, or endorsed by, the U.S. Government, Department of Defense, Department of the Army, or U.S. Army Space and Missile Defense Command (SMDC). This monthly newspaper uses offset reproduction and has a circulation of 3,000. Reader input is solicited and welcomed; however, no payment will be made for such contributions. For more information about SMDC visit our Web site at www.smdc.army.mil.

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Photo by Nell Drumheller

# A cross cultural experience

Students at the George Seitz Elementary School on Kwajalein Atoll spent a couple of hours learning more about the Marshallese lifestyle during their Manit Day celebration Sept. 25. Marshallese instructors taught mini courses in coconut husking, weaving, music and dance, legends, tattoos, Juk-Juk rice balls, language and outrigger canoes. Jose deBrum, a Marshallese high school student on Kwajalein, introduces third graders, Devin Wildfang, 8, left, John Sholar, 8, Gannon Bowman, 9 and Ariana Johnson, 8, to the traditional way to husk a coconut. The students are from Jennifer Keck's class.

# What We Think

# The Eagle asks:

"What do you think about computerizing the voting process?"

Unless the system that is used is totally

hack proof and secure then the idea of

computerized voting is a bad one. There have been too many instances of



people gaining access to government computer systems and that one would be a prime target. The current system, while not completely fool-proof still works and should be used.

Sgt. 1st Class Edward C. Breeden S3 (Operations/Plans) NCOIC 1st Space Brigade Colorado Springs, Colo.



Tony Wade Help Desk Technician Information Management Division Arlington, Va.

I think everyone agrees that we need stronger voter representation. Nationwide, during the last presidential election, only 51 percent of voters that registered voted. I believe computer voting is a viable option. I mean, if we believe enough in computer security to allow our credit card information to be used for online shopping, why not our

Any voting system devised by humans, including our current paper and punch card ballots, can be corrupted. I think that computerized voting systems could be developed that would provide protection and safeguards against voting fraud at least as strong as our current systems, if not better. Computerized systems could incorporate error checks to prevent such obvious errors as voting for two candidates for the same office on a single ballot.

I love the idea, but you do have to worry about computer hackers and software problems. I think those are everyone's major worries. It would be necessary to have a backup system in case something went wrong with the computerized system.



Jean Sims Program Analyst Program and Policy Division Resource Management Office Huntsville, Ala



Staff Sgt. Kurtiss Clark Legal NCO 100th Missile Defense Brigade (Ground-based Midcourse Defense) Colorado Springs, Colo.

I believe an

Internet-based

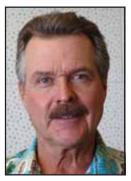
voting system

ballots.

would be great for

persons who must

complete absentee



Tom Clarkson Strategic Planning Office U.S. Army Kwajalein Atoll

Democracy, founded on individualism and interdependence, is best realized through joining neighbors at our local polling place. Political on-line shopping! I certainly hope not.

Judy Krawcyk Program Analyst Program and Policy Division Resource Management Division Huntsville, Ala.



Kelly Simpson Paralegal Specialist Command Counsel Office Arlington, Va.



The Eagle October 2004

# Sanchez reflects on role of Hispanics in the military

By Samantha L. Quigley **American Force Press** Service

**WASHINGTON. D.C.** — To commemorate National Hispanic Heritage Month, the U.S. military's highest-ranking Hispanic officer described Hispanics' role in the military as one of mutual benefit.

Lt. Gen. Ricardo Sanchez, commander of the Army's 5th Corps in Germany, said the military can help Hispanics find their way out of poverty, and the military gets great dedication in return.

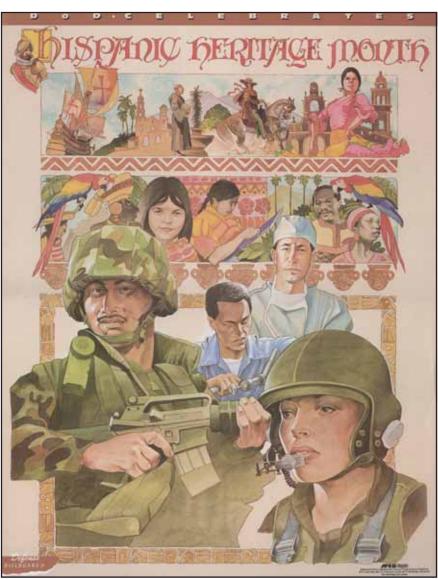
"I think what (Hispanic service members) bring is tremendous loyalty and tremendous dedication to our country and to our democratic values," said Sanchez during a Pentagon Channel and American Forces Press Service interview in September. "We also bring the diversity to our services that are so powerful in making us the great military that we are."

In the past few years, Sanchez said, there has been an effort to increase the representation of minorities, Hispanics in particular, in the military.

Sanchez said that maintaining Hispanic representation in the military has been difficult and remains a challenge, particularly in the officer corps. "Part of that difficulty is that Hispanics are not graduating from high school and then not going on to college to get commissioned,"

In general, across American society, Hispanics are making contributions across all of society, said Sanchez, who formerly commanded Combined Joint Task Force 7 in Iraq.

"I think it is a well-known fact that the Soldier, the service member, that leaves the military and reintegrates



back into society in civilian life is a lot more disciplined, is a lot more mature, and has a perspective on our democratic principles and on world issues that is much greater than the average initial hire out in our society," he said.

In looking at the recent past, Sanchez said he sees an increased representation of Hispanics across all sectors of society. This is due, in part, to the increase in the Hispanic population, now the largest minority group in the United States, and an increased emphasis on education.

"I think there is a very powerful base that can be garnered if we can, in fact, encourage continued education, encourage that segment of our culture," Sanchez said.

The general said opportunities exist for Hispanic service members. Sanchez admitted his military service as a minority officer hasn't always been smooth sailing, but many people helped him along the

"There have been challenges as a minority officer within this institution," Sanchez said. "But when I look back and think about all the superiors that helped me succeed, you can't help but accept that this is probably one of the best institutions in our country for

providing equal opportunity to all of its members. And our procedures and our systems are such that it does give every segment of our society the ability to be successful."

The system, he said, provides the opportunity for success based on potential and competence, allowing for true equality.

He noted that in his career he has met Hispanic Soldiers who were not American citizens but were dedicated to the American way of life — the freedoms and the opportunities.

With National Hispanic Heritage Month, Sept. 15 to Oct. 15, Sanchez said it's important for the military to celebrate diversity in the armed forces.

"When I look at our Army in the different theaters that I have served in ... we have all of our ethnicities, all of our races represented, and this is a concept that a lot of societies have not been able to embrace," Sanchez said. "We're a country that provides equal opportunity based on our democratic principles."

He said the fact that all ethnicities are represented gives America its strength and makes the U.S. Army the best in the world.

As for the best way for commands to celebrate Hispanic heritage during the month, Sanchez said leaders must commit to ensuring that all minorities, not just Hispanics, understand the significance of their service.

"It's about ensuring that those minority groups understand the value of their service, the value of the contributions that they have made as individuals and also as a segment of the society to the overall good of America," Sanchez said.



# **Huntsville mayor signs Hispanic Heritage Month proclamation**

Loretta Spencer, seated, mayor of Huntsville, Ala., celebrates the beginning of Hispanic Heritage Month by signing the Hispanic Heritage Month proclamation Sept. 15 during a ceremony in her office. Sgt. 1st Class Adriano Vasquez, left, Aviation and Missile Command; Bernard Collier, Redstone Arsenal-Garrison; Maria Taylor, Security Assistance Management Directorate; John Gonzalez, Integrated Materiel Management Center; Johnetta Graves, Space and Missile Defense Command; Robert Salinas, Logistics Support Agency; Ed Adams, Marshall Space Flight Center; Yolanda Caballero, Research, Development and Engineering Center; and Sqt. 1st Class Monique C. Mixon, Headquarters and Headquarters Company, Garrison, Redstone Arsenal, attended the ceremony.

# All systems 'go' for next phase of Low Cost Interceptor

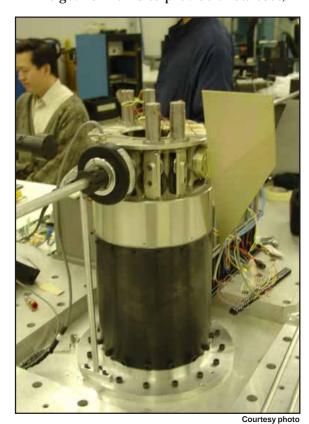
By Debra Valine Editor, *The Eagle* 

HUNTSVILLE, Ala. — The more than \$6 million contract awarded to Miltec Corp. Aug. 31 moves the Low Cost Cruise Missile Defense/Low Cost Interceptor into Phase 2 of the planned three-phase technology integration demonstration program.

The U.S. Army Space and Missile Defense Command, Technical Interoperability and Matrix Center, is developing the LCI missile as a means to more effectively combat unsophisticated low-cost, air-breathing threats launched toward U.S. forces and allies.

The primary advantage of LCI is life cycle cost affordability. It is a plug-and-fight asset that leverages from existing radars, launchers, communications and elevated sensor.

The goal of LCI is to provide a low cost,



The test engineers at MPC Products conduct testing of the CAS hardware verifying the performance of this LCI subsystem.

long-range interceptor to engage first and second generation cruise missiles, unmanned aerial vehicles and rotary wing aircraft. LCI is being designed to complement current and future air defense capabilities. It is expected that the LCI missiles will cost approximately \$100,000 each in FY00 manufacturing dollars.

"This is a smart investment by the Army," said Ivy Pinion, president of Miltec Missiles and Space Company,

the parent company of Miltec Corp. "LCI provides an affordable means to defend against saturation raids of low-tech threats. In addition, the footprint that LCI provides eliminates mobility in theater as an issue, and we think it offers U.S. homeland defense options for our coastline and potential high-profile targets like nuclear power plants."

Phase 2 will integrate the hardware, develop flight software and conduct testing. Phase 3 would be to conduct flight intercept tests.

There are three milestones connected to Phase II:

- Conduct a Short Hot Launch (SHOTL) test of a full-size missile with a short burn motor to collect launch dynamics and initial flight data in July 2005
- Conduct all subsystem critical design reviews and then a full-up system critical design review
- Conduct a controlled flight test.

"That controlled flight test will be a fullscale missile test," said David Tilson, LCI program lead. "We will fly it from some range, obtain telemetry and validate our high fidelity simulations."



Courtesy photo

In early July, Miltec engineers, Roland Anderson and J.T. Turner, load the Low Cost Interceptor Avionics Breadboard Test Bed (LABT) into the support vehicle in preparation of the first captive carry test. The LABT is the integration of the Honeywell Inertial Measurement Unit, Navstrike GPS (global positioning system) and antenna, LCI electronics and power supply.

The program already has evaluated existing technologies in propulsion, seekers, missile guidance and lethality.

"Currently we are conducting acceptance testing on the control actuation system — the fins that control the missile," Tilson said. "Once we accept that, the system will be brought to Huntsville and integrated into our avionics testbed, which is a hardware-in-the-loop, software-in-the-loop capability that we are developing.

"We have integrated flight avionics to include the Honeywell IMU (Inertial Measurement Unit) and a Rockwell Collins Navstrike GPS (global positioning system) navigation processor with initial flight software and we have been conducting testing," Tilson said. "It is mounted in the back of a truck and we drive it around to test the navigation software."

Miltec Corp. provides the avionics, airframe and subsystem integration for Phase 2. Northrup Grumman Electronic Systems Division is providing the seeker; Aerojet is the propulsion subcontractor; and MPC Products is providing the control actuation system.

# Kwajalein Mission Control Center resembles movie set

By Jan Waddell Reporter, *Kwajalein Hourglass* 

he Kwajalein Mission Control Center, Kwajalein Atoll is a critical part of every mission.

The KMCC, like mission control seen in movies, features a variety of displays and control stations where staff monitors every aspect of the mission.

The KMCC has a variety of personnel handling different parts of each mission. Government personnel including the range control officer who executes the mission and represents the Ronald Reagan Ballistic Missile Defense Test Site in the mission countdown sit at the main console.

"They are assessing both the performance of the RTS sensors and the behavior of the target complex and making any necessary decisions to alter the pre-determined test plan or invoke pre-planned contingency plans to ensure that RTS collects the data our customer is paying us to collect," said Steve Hill, manager of Plans and Operations.

The Mission Technical Director stands behind the console operators and is the real-time decision maker, directing the overall data collection operation.

Not shown is the lower tower seating, where the U.S. Army Kwajalein Atoll and RTS commanders sit along with the Massachusetts Institute of Technology and Kwajalein Range Services site leaders.

The commanders are on hand in the event a command-level decision is needed.



Photo by Jan Wadde

The range control officer, left, looks at the screens in the Kwajalein Mission Control Center, Kwajalein Atoll. The other personnel are console operators who monitor the different RTS sensors and communications.

# **Awards/Promotions**

#### **Civilian Promotions**

**Jon E. Busick,** GS-11, Colorado Springs, Operations, G-3, Space-based Blue Force Tracking

Melisa H. Gilbert, GS-15, Huntsville, RDA, Command Integration Division
Jessica J. Hardage, GS-09, Huntsville, Office of PARC/Contracting and Acquisition
Management, Policy and Pricing Branch
Mary A. Hill, GS-11, Huntsville, Technical
Center, Advanced Technology Directorate
Stephen A. Hutson, GS-11, Huntsville, Tech
Center, Kinetic Energy Interceptor Directorate
Dene A. Jackson, GS-11, Arlington,
Personnel, G-1, Community and Family
Program Division

**Norma J. Jenkins**, GS-12, Colorado Springs, Intelligence, G-2

**Debra B. Mitchell**, GS-09, Huntsville, Research, Development and Acquisition, Command Integration Division

**Kenneth E. Moseley**, GS-14, USAKA, Command Safety Directorate

**James W. Penley**, GS-15, Huntsville, Office of Legal Counsel

**Kay L. Platter**, GS-14, Colorado Springs, Logistics, G-4, Supply and Transportation Division

Barry C. Pollard, GS-14, Huntsville, Tech Center, Kinetic Energy Interceptor Directorate Michael D. Rhoades, GS-12, Colorado Springs, Communications, G-6

**Edward A. Sangalang**, GS-12, Huntsville, Resource Management, G-8

**Roger T. Schaetzel**, GS-12, Colorado Springs, Communications, G-6, Regional Satellite Communications Support Center

Allison R. Sibert, GS-11, Huntsville, Technical Center, Directed Energy Directorate Matrix

**Richard Szcepanski**, GS-14, Huntsville, Tech Center, Space Technology Directorate **Kent L. Waller**, GS-14, Huntsville, Tech Center, Space Technology Directorate

#### **Military Promotions**

Spc. Slavador A. Cota, Camp Roberts, Calif., 1st SATCON Battalion, D Company Staff Sgt. Fredrick C.J. Edison, Fort Buckner, Japan, 1st SATCON Battalion, E Company

Spc. Daniel J. Gladden, Camp Roberts, Calif., 1st SATCON Battalion, D Company Spc. Gary R. Grooms, Colorado Springs, SMDC Operations Center

**Spc. Cade M. Horning**, Fort Buckner, Japan, 1st SATCON Battalion, E Company **Staff Sgt. Sherman L. Johnson**, Fort Meade, Md., 1st SATCON Battalion, B Company **Sgt. Thomas S. Kepler**, Fort Detrick, Md., 1st SATCON Battalion, A Company

**Spc. Curtis R. Pouliot**, Camp Roberts, Calif., 1st SATCON Battalion, D Company **Spc. Johathon Presley**, Landstuhl, Germany, 1st SATCON Battalion, C Company

**Staff Sgt. Eric T. Robinett**, Colorado Springs, 1st Space Battalion, 1st Space Company,

Detachment A

Sgt. Thomas J. Schmenk, Camp Roberts, Calif., 1st SATCON Battalion, D Company Staff Sgt. Michelle Shockley, Colorado Springs, 1st SATCON Battalion, Headquarters Pvt. 1st Class George N. Stratakos, Colorado Springs, 1st Space Battalion, 1st Space Company, Detachment C

**Staff Sgt. James Wayman**, Colorado Springs, 2nd Space Company

**Spc. Michael W. Winkler**, Colorado Springs, 1st SATCON Battalion, Headquarters and Headquarters Company

#### **On-the-Spot Cash Awards**

**Edwin A. Barber,** Huntsville, Battle Lab, Analysis and Operations Directorate, Studies and Analysis Division

**Jeanetta G. Burwell**, Huntsville, Research, Development and Acquisition, Command Analysis Division

**Sharon J. Crawford**, Huntsville, Tech Center Operations

**Robie W. Darnell**, Huntsville, Logistics, G-4, Supply and Service Division **Patricia A. Duggan**, Huntsville, Office of PARC/Contracting and Acquisition

Management, Policy and Pricing Branch **Thomas K. Hamilton**, Huntsville, Tech
Center, Directed Energy Directorate Matrix **Theresa B. Hornung**, Huntsville, Intelligence,
G-2, Security Division

Hazel P. Hyde, Huntsville, Tech Center, Joint Center for Test and Evaluation

**Janice S. Jean**, Huntsville, Tech Center, Sensors Directorate

**Molly I. Krisher**, Huntsville, Resource Management, G-8, Program Support Division **Michael W. Liston**, Huntsville, Intelligence, G-2, Intelligence Division

**Marshall R. McBride**, Huntsville, Battle Lab, Simulations Directorate, Computer Resources Division

**Tullie M. Miller**, Huntsville, Office of PARC/Contracting and Acquisition Management, Branch K

**Debra B. Mitchell**, Research, Development and Acquisition, Command Integration Division

Jeffrey C. Olson, Huntsville, Technical Center, Sensors Directorate

**Beverly L. Osborn**, Huntsville, Intelligence, G-2, Intelligence Division

**Claudette C. Owens**, Huntsville, Battle Lab, Simulations Directorate, Computer Resources Division

**Ricardo L. Parks**, Huntsville, Tech Center, Kinetic Energy Interceptor Directorate **George M. Parsons**, Huntsville, OTII, Extended Air Defense Testbed Directorate **Diane D. Patch**, Huntsville, Tech Center, Sensors Directorate

**Jimmy Pleasant**, Huntsville, Research, Development and Acquisition, Command Analysis Division

**Abigale R. Ricks**, Huntsville, Research, Development and Acquisition Staff **Henry E. Sikes**, Huntsville, Tech Center, Directed Energy Directorate Matrix

**Jeffrey A. Stewart**, Huntsville, Intelligence, G-2, Intelligence Division

**Melva J. Tillar**, Colorado Springs, Command Counsel

**Brenda S. Turner**, Huntsville, Intelligence, G-2, Security Division

**Rickey A. Upton**, Huntsville, Technical Center, Sensors Directorate

**James T. Watkins**, Huntsville, Battle Lab, Simulations Directorate, Simulation Development Division

#### **Special Act Awards**

**John M. Arbaugh**, Huntsville, Logistics, G-4, Logistics Support Division

**Deborah K. Asberry**, Huntsville, Logistics, G-4, Logistics Support Division

**Gordon M. Baxendale**, Colorado Springs, Operations, G-3

**Dorothy F. Bell**, Colorado Springs, Logistics, G-4, Supply and Transportation Division

**Richard C. Bowen**, Huntsville, Tech Center, Information Science and Technology Directorate Matrix

**Rhonda L. Brock**, Huntsville, Office of PARC/ Contracting and Acquisition Management, Policy and Pricing Branch

**Teresa H. Brown**, Huntsville, Intelligence, G-2, Security Division

**Paula R. Brumlow**, Huntsville, Personnel, G-1, Civilian Personnel Division

**Richard A. Burks**, Colorado Springs, FDIC West, Space Office

**Sharon J. Crawford**, Huntsville, Tech Center, Tech Center Operations **Wilfred H. Dennis**, Huntsville, Intelligence,

G-2, Security Division *Clyde N. Elliott*, Huntsville, Tech Center,

Systems Directorate

Horace L. Garner, Huntsville, Battle Lab,

Simulations Directorate, Computer Resources Division **Patsy C. Gasser**, Huntsville, Engineering

Division, Technology Branch

Steven R. Groves, Colorado Springs, Space
Directorate, Concepts and Initiatives Division

Anthony S. Hodgkins, Colorado Springs,
Operations, G-3, Operations Center

Dene A. Jackson, Arlington, Personnel, G-1,

Community and Family Program Division **Terry L. Jernigan**, Huntsville, Intelligence, G-2, Security Division

**Andrew J. Johnson**, Huntsville, Battle Lab, Simulations Directorate, Computer Resources Division

**William E. Jordan**, Huntsville, Battle Lab, Simulations Directorate, Simulation Development Division

Steven B. Lundberg, Huntsville, Office of Legal Counsel

**Jeri K. Manley**, Huntsville, Tech Center, Test and Evaluation Directorate

Yancy C. Mitchell, Huntsville, Tech Center Operations

**Janie W. Montgomery**, Huntsville, Resource Management, G-8, Program and Policy Division

**Joseph L. Motley**, Huntsville, Research, Development and Acquisition, Command



Photo by Rick Lehner, Missile Defense Agency

The third ground-based interceptor was transported to its silo and emplaced Sept. 15. The interceptors are designed to destroy incoming intercontinental ballistic missiles before they reach U.S. airspace. They are part of an integrated system of sensors, ground-and sea-based radars and an advanced command and control, battle management and communication system designed to detect, track and launch an interceptor to destroy a target warhead before it can reach its intended target in any of our 50 states.

# Three more interceptors emplaced at Fort Greely

FORT GREELY, Alaska — Three missiles were emplaced by the Ground-based Midcourse Defense (GMD) element of the U.S. Missile Defense Agency at

Fort Greely, Alaska, in September, bringing the total to five. The sixth and final missile for 2004 is scheduled to be emplaced in mid-October. Two interceptors are also

planned for emplacement late this year at Vandenberg Air Force Base, Calif. Although the system will initially have a limited capability when it becomes operational later this year, it will mark the first time the United States has a capability to defend the entire country against a limited attack by a longrange ballistic missile.



Photo by John Upp

# Former SMDC commanders hold roundtable discussions

The former commanders of U.S. Army Space and Missile Defense Command met for a roundtable discussion Aug. 26 in Arlington, Va. The one-day event included briefings on major changes in the command, the command's vision of the way ahead and roundtable discussions. From left: Lt. Gen. (Ret.) Donald M. Lionetti, U.S. Army Space and Strategic Defense Command, August 1992-September 1994; Lt. Gen. (Ret.) John F. Wall, U.S. Army Strategic Defense Command, June 1985-May 1988; Lt. Gen. (Ret.) Edward G. Anderson III, Space and Strategic Defense Command, October 1996-September 1997 and U.S. Army Space and Missile Defense Command, October 1997-August 1998; Lt. Gen. Larry J. Dodgen, SMDC, December 2003 - present; Lt. Gen. (Ret.) Robert D. Hammond, Strategic Defense Command, July 1988 - June 1992; Lt. Gen. (Ret.) Jay M. Garner, Space and Strategic Defense Command, September 1994-October 1996; Maj. Gen. (Ret.) Eugene Fox, Ballistic Missile Defense Program Manager, September 1984-July 1987; Lt. Gen. (Ret.) Joseph M. Cosumano Jr., SMDC, April 2001-December 2003. Not pictured: Lt. Gen. (Ret.) John Costello, SMDC, September 1998-March 2001.

# **Awards/Promotions**

Integration Division

Kim P. Newman, Huntsville, Office of PARC/ Contracting and Acquisition Management,

Karen M. Norton, Huntsville, Research, Development and Acquisition, Command Integration Division

Justin R. Novak, Huntsville, Battle Lab, Simulations Directorate, Simulation **Development Division** 

Robert G. Piper, Colorado Springs, Personnel, G-1

Brenda L. Rains, Huntsville, Tech Center **Operations** 

Rachel H. Ramey, Huntsville, Tech Center Operations

David L. Sallo, Huntsville, Research, Development and Acquisition, Command **Analysis Division** 

Janet L. Schwarzbart, Colorado Springs, Office of PARC/Contracting and Acquisition Management, Contracting Division Kathy A. Simmons, Huntsville, Intelligence,

G-2, Intelligence Division Theodora F. Stewart, Huntsville, Research, Development and Acquisition, Command

Integration Division Patricia S. Vittitow, Huntsville, Tech Center,

Systems Directorate Randolph P. Wampler, Colorado Springs,

Terri Lynn Washburn, Huntsville, Office of PARC/Contracting and Acquisition Management, Command Support Services

Andrea A. Weathington, Huntsville, Tech **Center Operations** 

Clarence L. Wells, Colorado Springs, Operations, G-3, Space Branch

Beth B. Whitaker, Huntsville, Research, Development and Acquisition, Command Integration Division

Jason A. Williams, Huntsville, Tech Center, Kinetic Energy Interceptor Directorate Michelle D. Williams, Huntsville, Office of PARC/Contracting and Acquisition Management, Command Support Services Branch

#### **Time-Off Awards**

Mario Ares, Huntsville, Research, Development and Acquisition, Protocol Stephen W. Brodersen, Fort Leavenworth, Kan., FDIC, Combined Arms Center Kirby R. Brown, Colorado Springs, Battle Lab, Space Directorate

Deana R. Clark-Moller, Colorado Springs, **FDIC** 

Christopher M. Embry, Huntsville, Research, Development and Acquisition, Command Analysis Division

Thomas A. Gray, Fort Leavenworth, Kan., FDIC, Liaison Officer

Charles R. Hill, Huntsville, Battle Lab, Simulations Directorate, Simulation **Development Division** 

Andre H. Parent, Landstuhl, Germany, 1st Satellite Control Battalion, C Company Shirley M. Posey, Huntsville, Engineering Office

Paula R. Smith, Colorado Springs, FDIC Alexis P. Vonspakovsky, Huntsville, Tech Center, Test and Evaluation Directorate Matrix

#### **Invention Awards**

Michael J. Dorsett, Huntsville, Tech Center, Joint Center for Technology Integration John H. Hennings, Huntsville, Tech Center, Joint Center for Technology Integration Robert W. McMillan, Huntsville, Tech Center, Office of Associate Director, Space and Intelligence

#### Commander's Award for Civilian Service

John F. Crawford, Huntsville, Tech Center, Systems Directorate Matrix

#### Length of Service Awards

#### <u>35 Years</u>

Scott A. Horkman, Huntsville, Logistics, G-4, Supply and Service Division Ronald J. Liedel, Huntsville, Battle Lab, Computer Resources Division

#### 30 Years

Tana K. Beall, Colorado Springs, Operations, G-3, Force Modernization Division Connie B. Black, Huntsville, Information Management, G-6, Plans and Operations Support Division

James R. Brothers, Huntsville, Tech Center, **Directed Energy Directorate** 

Sherry F. Fincher, Huntsville, Resource Management, G-8, Program and Policy Division

Jess F. Granone, Huntsville, Tech Center Molly Krisher, Huntsville, Resource Management, G-8, Program Support Division Kenneth Moseley, USAKA, Test and **Evaluation Center, Command Safety** Directorate

Karen M. Norton, Huntsville, Research, Development and Acquisition, Command **Integration Division** 

William Strickland, Huntsville, Tech Center, Sensors Directorate Mark VerStraten, USAKA, Directorate of

Logistics and Community Activities

## **25 Years**

**Sharon Graham**, Huntsville, Equal **Employment Opportunity Office** Judy H. Krawcyk, Arlington, Resource Management, G-8, Program and Policy Division

Pamela Porter, Colorado Springs, Operations, **Command Group** 

Edward A. Sangalang, Huntsville, Resource Management, G-8, Program Support Division Barbara W. Scales, Huntsville, Office of PARC/Contracting and Acquisition Management, Policy and Pricing Branch Candace Simon, Arlington, FDIC, Training and Doctrine Division

Jean E. Sims, Arlington, Resource Management, G-8, Program and Policy Division

#### 20 Years

Kaye K. Blankenship, Huntsville, Tech Center, Space Technology Directorate Donna H. Davis, Huntsville, Personnel, G-1, Civilian Personnel Division Steven Eacret, Huntsville, Tech Center, Test and Evaluation Directorate Matrix

Lillie V. Jackson, Huntsville, Office of PARC/Contracting and Acquisition Management

Sherry Majafza, Huntsville, Tech Center, Information Science and Technology Directorate

Simone U. Philson, Huntsville, Battle Lab, Analysis and Operations Directorate, Battle Lab Operations Division

Jon E. Schoenfield, Huntsville, Battle Lab, Missile Defense Directorate, Combat **Applications Division** 

Vernal Scales, Huntsville, Tech Center, Data Analysis and Exploitation Directorate Kenneth Strom, Huntsville, Tech Center, Test and Evaluation Directorate

Patrick A. Tilley, Huntsville, Tech Center, Data Analysis and Exploitation Directorate C. Phillip Watson, Huntsville, Tech Center, Space Technology Directorate Matrix

8 The Eagle October 2004

# **Space Operations Network goes live**

By William S. Murray FA Proponent Office

he Space Operations Network (SONET), the Army's premier Web site for the space professional, serves as the web-based centralized storehouse of knowledge for the military space community. It provides current, relevant news; enhanced space knowledge; immediate news updates; global communications; key information at the click of the mouse; the ability to reach out or reach back to fellow space experts; real-time interaction; interaction/communication with SMDC and space community leaders; and a dynamic and ever expanding resource of space knowledge. In today's time, with a geographically dispersed population of space professionals, the SONET provides essential capabilities for members to increase knowledge and better execute missions.

An ever-growing repository of periodical articles, regulations, briefings, studies, white papers and Internet links in the LIBRARY furnish that reference capability so vital in the fast-paced world of space operations. When the user needs a greater source of tested, experience-based information, the DISCUSSION and COLLABORATION sections allow users to reach out to the user community and tap its knowledge base.

The Discussion Board provides a place to conduct unclassified threaded discussions on current issues in the space operations field. The Online Collaboration Center grants users the ability to collaborate with fellow SONET members on unclassified projects by sharing documents and files. Members upload various types of files for downloading, discussing, viewing and

changing. Such collaboration and discussion enhances communication and mentoring in areas such as Space Support Elements, Space Force Command and Control, Intelligence, Surveillance and Reconnaissance, Army Space Support teams or any other topic of choice.

The SONET is open to a select group of space professionals across all services and agencies and membership has been steadily growing since its inception. Continuous updates provide the latest military and civilian space news, culled from a variety of sources and posted on the HOME page.

The LOCATOR is a database containing

contact information for all of the SONET's members. It allows any user to look up other members based on their name, location, expertise or other information and provides relevant contact information. The LEARNING CENTER, still under construction, is expected to provide training modules leading to space operations training and certifications. Announcements will be posted listing additional training opportunities.

The FA40 Personnel Proponent Office, manager of SONET, is exploring initiatives to develop a SIPRNET version of SONET, scheduling routine webcast events with key leadership in SMDC and the space community, and making SONET more accessible to users through linkage to NIPRNET e-mail accounts, so users are immediately aware of new information posted in SONET.

Through regular use by its members, the SONET is becoming a dynamic knowledge multiplier for all military space professionals.

If you would like more information on the SONET or would like to request access, please contact Lt. Col. Michael Powers, chief, FA40 Proponent Office at (703) 602-1508, DSN 332 or the SONET content manager, Bill Murray at (703) 602-1433.



A view of the home page of the Space Operations Network (SONET) Web site.

#### **Cancer Research**

Continued from page 1

Surgeons need more information to advise patients on what action to take to combat the disease.

"Mammograms will not do it alone," Shriver said. "When a woman decides to have a lumpectomy and radiation for cancer treatment, the cancer can come back in the same breast. In fact, there is a 12 to 15 percent chance that it will because we cannot know if we are getting all of it out."

Using missile defense algorithms to analyze mammograms, Shriver believes surgeons can see how big and what shape the cancer is and use that information to improve planning for breast cancer surgery when the breast is to be spared.

"I discovered in (the very first) conversations with Jess Granone (director, SMDC's Technical Center) that similar algorithms are used for missile defense," Shriver said. "These algorithms work by classifying spots and identifying areas of interest in a background of 'clutter'... similar to analysis of mammograms as well as our work in separating and identifying protein molecules

from breast cancer patients the computer doesn't care if the data it is analyzing represents protein molecules or missiles."

The team investigating this possible spin-off of missile defense technology includes Walter Reed Army Medical Center, Windber Research Institute and SMDC. The SMDC team is comprised of Pete Kirkland, Kevin Nash, Lee Ray, an electronics engineer in the Technical Center, and Granone. Dr. Robert Smith, a Huntsville radiologist, is donating his time to the effort as well. He is providing information on what radiologists look for when screening mammograms. That information is helpful when developing the algorithms.

"We have developed the detection and discrimination algorithms, but we still have to test them on many mammograms," said Kirkland, a senior research scientist with the Technical Center. "We can detect anomalies; however discriminating cancerous from non-cancerous (tissue) is the big issue."

Kirkland said the team is

working three specific tasks: using imaging devices to distinguish between cancerous and non-cancerous anomalies; using 2-D gel protein expression to determine early if a person might have cancer; and taking clinical and lifestyle data from Walter Reed and Vital Solutions in Huntsville to develop a Response Surface Model to predict the probability of patients getting cancer.

"We are working with Jeffrey Zelickson, president of Vital Solutions, Inc., to develop a database that will be used to train the Response Surface Model to predict the probability that a patient will get cancer," Kirkland said. The model being developed would likely be used for prediction in a clinical setting.

"We do not know if we got lucky on the first few things," said Nash, an electronics engineer in the Technical Center who is also working on the project. "We think our approach is solid, but we do not want to make any claims until we test it against a big data set."

"We are doing all of this inhouse and it's in addition to our regular duties," Kirkland said. "It's not our primary job, but we expect payoffs for missile defense as well. If we can detect anomalies in the breast, maybe we could use the same method for missile defense to discriminate against targets in clutter. It is a very similar problem."

The researchers are hoping to know whether or not this approach will work by January 2005. The final determination of the usefulness of this approach will be determined by the medical community and not by engineers.

"We have to decide whether we can do anything with this or not," Kirkland said. "We have more than 1,000 mammograms we are processing. I think once we process most of those, we will have an answer.

"We are cautious because we have to be right," Kirkland said. "Whatever we do must have greater than a 90 percent probability of success. A radiologist would use this tool to help them make a diagnosis; it will not take the place of the radiologist. That is why Dr. Smith's involvement is so important to us. We have to present the data to a radiologist in a way that he can use, not the way we would normally use it."

#### **November 2003**

### SMDC, National Guard activate nation's first Ground-based Midcourse Defense Brigade

By Maj. Laura Kenney **SMDC Public Affairs** 

**PETERSON AIR FORCE BASE, Colo.** — An historic moment for the nation's homeland defense strategy took place here Oct. 16 when the U.S. Army Space and Missile Defense Command and the Colorado Army National Guard activated the nation's first Ground-based Midcourse Defense Brigade.

The brigade will operate the first part of the integrated Ballistic Missile Defense System, which, in concert with sister services, is designed to protect the nation from accidental or intentional limited ballistic missile attacks. It will be manned by Colorado Army National Guard and

active component Soldiers.

The brigade will provide expertise to U.S. Northern Command's command and control operations from the Cheyenne Mountain Operations Center.

Another component of the brigade, the Alaska **Army National Guard** Missile Defense Space Battalion, will be activated in December. It will provide operational control over ground-based interceptors located in Alaska.

While the GMD Brigade is assigned to SMDC, its operators execute the decision/directive from Northern Command to destroy a ballistic missile threat. The brigade also has responsibilities to both NORTHCOM and U.S. Strategic Command.

Command relationships are still being worked out at the four-star level due to the possible trans-regional nature of the threat.

### Events database provides one-stop reference location for future exercises. experiments and wargames

By Rachelle Pestikas and Steve Overton

 ${f CRYSTAL\ CITY,\ Va.}-{f U.S.\ Army\ Space}$ and Missile Defense Command/Army Forces Strategic Command's participation in and execution of selected Exercises, Experiments and Wargames (EEW) is central to the successful development and integration of space, global missile defense, command, control, communications, computers, intelligence, surveillance and reconnaissance (C4ISR),

global strike, and information operations capabilities.

By actively participating in selected events, SMDC/ARSTRAT can effectively integrate its five mission areas into national, joint and Army warfighter activities and future operations. Success will enable SMDC/ARSTRAT to identify lessons, provide meaningful operational assessments of current capabilities and influence changes across all doctrine, organizations, training, materiel, leadership and education, personnel and facilities (DOTMLPF) domains.

Because of the vast number of EEW available for participation, G-3 has established a process by which the command's participation in selected events is properly planned, coordinated, resourced and executed.

The SMDC/ARSTRAT G-3 Training and Readiness Branch, in conjunction with the EEW Integrating Office in Arlington, Va., and the Computer Information Office in Colorado Springs, Colo., has developed



Air Force Maj. Gen. Mason C. Whitney, adjutant general of the Colorado National Guard, unfurls the flag of the newly activated Colorado National Guard Midcourse Defense Brigade. The 'stand up' took place at Peterson Air Force Base, Colo., and Lt. Gen. Joseph M. Cosumano Jr., commanding general, U.S. Army Space and Missile Defense Command, standing to Whitney's right, hosted the event with Whitney. The commander of the new brigade, Col. Gary Baumann, stands to Cosumano's right.

> the Events Database (ED) to generate and maintain a library of information on EEW events and, to a limited extent, operations in which the command participates.

### Joint Tactical Ground Station-Pacific supports major exercise

By Lt. James Brown **U.S. Navy** 

**OSAN AIR BASE, Korea** — "Exercise, Exercise, Exercise" were the first words heard over the First Detect/First Report (FD/FR) network initiated during Exercise Ulchi Focus Lens 03 after a simulated missile launch.

Joint Tactical Ground Station-Pacific Command and Missile Defense Space Tool (MDST) teamed up this year to support the largest exercise on the Korean peninsula. The role of these two agencies during the

exercise was threefold: to simulate single and multiple missile launches; to stimulate units on peninsula and within the Pacific Command theater to react by assuming the proper defensive posture; and to execute the appropriate operational plans on the peninsula and throughout the PACOM area.

The one- to two-week exercise tested the operational capabilities of the Sensorto-Shooter early warning networks. Operators of JTAGS PAC — consisting of Navy and Army members — manned the Defense Red Switched Network (DRSN) monitoring the PACOM FD/FR network during this major simulation exercise. MDST executed the script.

What made this exercise unique for the operators this year was their ability to support both real world and exercise activities simultaneously. MDST and JTAGS will team up again for the RECEPTION STATIONING ONWARD INTEGRATION Exercise-04 to be held in the spring.

#### SMDC sees many changes during Cosumano's time as commander

By Debra Valine Editor, The Eagle

On Nov. 18, Lt. Gen. Joseph M. Cosumano Jr. will relinquish command of the U.S. Army Space and Missile Defense Command and Army Forces Strategic Command in a change of command ceremony and special retirement review at 10 a.m. at Fort Myer, Va. Maj. Gen. Larry J. Dodgen has been nominated to be his successor. This ceremony will bring to a close Cosumano's 35-year military

When he assumed command in April 2001, Cosumano had a vision. He wanted the command to normalize space, provide layered force protection for commanders in chief throughout the world, and develop Soldiers and civilians with technical and leadership skills to support the Objective Force of the 21st Century.

"Our challenge is to continue providing the expertise, research and work that will move the nation closer to the ability to field a missile defense capable of protecting American citizens and deployed forces against missile attacks," Cosumano said in his column in The Eagle in June

In just two years, SMDC has made great progress in fulfilling that vision.

"I wanted to make the command more operationally focused," Cosumano said. "And I wanted to improve the command's team relationship. I wanted the operational and materiel development sides to work more closely together." SMDC reorganized in mid-2003 from having separate staffs in three locations to a single staff to support the command.

(The change of command and retirement ceremony for Lt. Gen. Cosumano had been previously scheduled for Nov. 18, but was postponed until Dec. 16 pending Senate confirmation of Maj. Gen. Larry J. Dodgen's promotion.)

## December 2003

#### Dodgen assumes command of SMDC

#### By Marco Morales **SMDC Public Affairs**

(The Senate confirmed Maj. Gen. Larry J. Dodgen for promotion to lieutenant general Nov. 25, paving the way for the change of command ceremony Dec. 16 making him the commanding general of the U.S. Army Space and Missile Defense Command.)

**FORT MYER, Va.** — Maj. Gen. Larry J. Dodgen assumed command of the U.S. Army Space and Missile Defense Command and the U.S. Army Forces Strategic Command Dec. 16 during a special retirement review in honor of outgoing Commanding General Lt. Gen. Joseph M. Cosumano Jr.

Assisting in the exchange of SMDC's unit guidons was Adm. James O. Ellis Jr., commander, U.S. Strategic Command; Gen. George W. Casey Jr., Vice Chief of Staff, U.S. Army; and SMDC Command Sgt. Maj. David Lady.

Attended by numerous VIPs and distinguished guests, the dual ceremony was conducted at Conmy Hall on Fort Myer, Va., led by the commander of troops, Col. Charles R. Taylor, commander, 3rd U.S. Infantry (The Old Guard).

#### Battle Lab introduces new battlefield imaging product

By Debra Valine Editor, The Eagle

**WASHINGTON, D.C.** — Using video gaming technology to translate battlefield images onto a 3-dimensional display is the concept behind U.S. Army Space and Missile Defense Command's newest efforts at improving the situational awareness of the battlefield picture.

**Taking Advanced Warfare Environment** (AWarE) technology currently in use to

provide real-time battlefield imagery, BattleVision uses gaming industry technology to translate the 2-dimensional battlefield map into a 3-D environment. The result is a real world image that closely resembles a video game screen.

SMDC and Camber Corp. of Huntsville, Ala., have been working together for a number of months creating BattleVision. The goal is to have a horizontally integrated solution for C4ISR visualization, rather than a multiple stovepipe approach. It will be generic with the capability to plug in new applications.

Camber Corp. built the algorithms for the database in the virtual world. Once information is transferred from AWarE (2-D) to BattleVision (3-D), the user can change the screen to show environmental elements such as snow, rain, daylight, darkness, wind direction, etc. Double clicking on an icon in the 2-D world will cause that item to show up in the 3-D world. The result is a better understanding of what an area actually looks like, with the real data being immersed in a virtual world to create the new reality expected by the modern warfighter.

#### Rumsfeld: space, missile defense essential

By Gerry J. Gilmore **American Forces Press Service** 

**WASHINGTON, D.C.** — Defending America, its overseas military and its allies from ballistic missiles laden with weapons of mass destruction (WMD) "is now America's highest priority," Defense Secretary Donald H. Rumsfeld noted Dec.

In prepared remarks provided by video feed to attendees of an Association of the United States Army-sponsored space and missile defense symposium in El Paso, Texas, Rumsfeld noted that some rogue states that sponsor terrorism "either have or are working hard to acquire nuclear, chemical or biological weapons of mass destruction and the long-range missiles necessary to deliver them."

This means, the defense secretary asserted, "we have truly entered a new age one that may well be the most dangerous America, and the democracies of the world, have ever faced."

The U.S. military is transforming itself, Rumsfeld pointed out, to "think and fight jointly" and to develop needed capabilities to confront 21st-century threats such as global terrorism and WMDs. And, the secretary said, "The importance of space and missile defense in this endeavor cannot be overstated."



1st Space Brigade Commander Col. David Shaffer, right, hands the unit's colors to incoming Commander Maj. Scot Cuthbertson at the recent change of command ceremony.

# January 2004

#### Change of command a first for **National Guard space battalion**

By Sgt. Nicole Bogenschutz Unit reporter

#### PETERSON AIR FORCE BASE, Colo. —

The 193rd Space Support Battalion recently said farewell to its first battalion commander, Lt. Col. Michael Yowell, and welcomed a new commander, Maj. Scot Cuthbertson. The change of command ceremony was the latest of many firsts for this young battalion.

The 193rd Space Support Battalion "stood up" Sept. 28, 2001. It was the first space unit in the Army National Guard. Its activation had already been planned, but was expedited due to the events of Sept. 11. Mobilization and training of Soldiers to meet the urgent need for 24/7 space operations in light of the tragedy was also greatly accelerated.

Since the unit's inception, there have been four mobilizations. Soldiers from these mobilizations have supported the Blue Force Tracking Mission Management Center, Information Operations Augmentation Cell, Army Space Support Teams and the Test and Evaluation mission. Army Space Support Teams and Test and Evaluation units have deployed in support of Operation Enduring Freedom and OPERATION IRAQI FREEDOM. They have also participated in major exercises around the globe. The battalion currently has an Army Space Support Team deployed to Baghdad.



Adm. James O. Ellis Jr., commander U.S. Strategic Command, left, Maj. Gen. Larry J. Dodgen and Lt. Gen. Joseph M. Cosumano Jr. stand ready for the passing of the U.S. Army Space and Missile Defense Command flag at the change of command ceremony Dec. 16 at Fort Myer, Va.



James Makemson, left, vice president and general manager, Turner Universal Construction Company; Mayor Loretta Spencer, mayor of Huntsville, Ala.; Congressman Robert (Bud) Cramer Jr. (D-AL); then-Maj. Gen. Larry J. Dodgen, commanding general, U.S. Army Space and Missile Defense Command; Senator Richard C. Shelby (R-AL); Senator Jeff Sessions (R-AL); Congressman Robert B. Aderholt (R-AL); Mayor Jan Wells, mayor of Madison, Ala.; Col. Robert Devlin, garrison commander, Redstone Arsenal; and Col. Robert Keyser, commander, Mobile District Corps of Engineers, cut the ribbon on Bldg. 5220 to mark the opening of the new Wernher Von Braun Complex on Redstone Arsenal Jan. 20.

# February 2004

#### **New Huntsville** complex dedicated to Von Braun

By Debra Valine Editor, The Eagle

**HUNTSVILLE, Ala.** — Well, it's official. The U.S. Army Space and Missile Defense Command on Jan. 20 dedicated its new building in the Wernher Von Braun Complex to honor the man who brought space and missile development to Huntsville, Ala., some 50 years ago.

The ribbon-cutting ceremony at Bldg. 5220 on Redstone Arsenal paves the way for SMDC's employees to begin the exodus in February from the leased building on Wynn Drive which has been home to SMDC for the past 35 years.

"By cutting the ribbon today,

we will accomplish several things," then-Maj. Gen. Larry J. Dodgen said. "We are moving our Huntsville headquarters onto a secure military facility. It will save the Department of Defense millions of dollars. This new \$39 million state-of-the-art building will pay for itself in just a few years and it will improve the quality of life for all of us."

"This is the first phase of a multi-phase project that we are going to build," Senator Richard C. Shelby, (R-AL) said. "I cannot think of a better person to name it for. They will soon start the second phase and we will be looking at the third.

"It is a tribute to Wernher Von Braun and his team that came here 50 years ago and put Huntsville on the map big time," Shelby said. "Redstone Arsenal is a jewel for the Army, NASA and others. This is another big step in the right direction to strengthen what

we do at Redstone Arsenal and national security and the nation. I am proud to have played a small part in honoring that great scientist, Wernher Von Braun."

#### Alaska Missile **Defense Battalion** activates

By Maj. Laura Kenney **SMDC Public Affairs** 

**FORT GREELY, Alaska** — A critical component of the nation's emerging missile defense system "stood up" here Jan. 22 when the Missile Defense Space Battalion was formally activated by its parent organizations, the U.S. Army Space and Missile Defense Command and the Alaska National Guard.

The battalion is part of the 100th Missile Defense Brigade (Ground-based Midcourse Defense) headquartered in Colorado Springs, Colo. The battalion will provide operational control and security over ground-based interceptors located in Alaska. The brigade operates the first part of the integrated Ballistic Missile Defense System, which, in concert with sister services, is designed to protect the nation

from accidental or intentional limited ballistic missile attacks.

Alaska National **Guard Soldiers will** man the battalion. Similarly, the brigade is staffed largely by Colorado guardsmen, with a small contingent of active Army Soldiers. The units have dual reporting chains — operationally to SMDC, and for personnel issues, to their respective state Guard channels.

"Today's activation marks an historic event. Using the National Guard is a good fit for this mission in keeping with their centuries-old role of defending the nation. The only difference is the technology," said the brigade commander, Col. Gary Baumann.

The system is scheduled to be operational this fall, by presidential directive. The timeline was expedited due to the events of Sept. 11, and officials expect to meet the accelerated deployment date.

GMD is designed to intercept and kill any incoming missile in the "middle" phase or "midcourse" of its trajectory, after the boost or launch, and before it reaches re-entry into the earth's atmosphere to impact, thereby destroying that target in space.

Working closely with early warning architecture, provided in part by the Air Force and the Navy, GMD will launch a booster missile toward a target's predicted location releasing a "kill vehicle" on the path of an incoming target. The kill vehicle uses data from the ground-based radars and its own on-board sensor to collide with the target.

#### **IFT-13B** scores successful launch

By Jim Bennett Editor, Kwajalein Hourglass

The last of his briefings done, Maj. Gen. John Holly stepped out on Holmberg Fairways to take in a few holes before catching his plane back to



The IFT-13B launch Jan. 27 marks the first flight of a new booster designed by Orbital Sciences Corporation. The booster carries the exo-atmospheric kill vehicle and simulates an intercept using a mock

Huntsville, Ala., last month.

The program director for the Ground-Based Midcourse Defense Joint Program Office seemed to walk with an extra spring in his step after a successful booster launch and test Jan. 27.

"These kinds of missions are a lot easier to return home on," he said. "And we'll be back in March to conduct another mission."

The mission marked the first flight of a new booster designed by Orbital Sciences Corp. The booster carries the exoatmospheric kill vehicle into the sky where it detaches, seeks out an incoming warhead and collides with it, destroying the target.

In the test, officials wanted to see that the booster would fly within mission parameters. The booster flew a successful mission in the United States in August. This test, however, simulated an intercept using a mock EKV and based on projections of where a target would have been.

Calling the test "a very important milestone in the program," Holly added the mission tested the latest interceptor communications system and other new program system changes, or "first-time risks."

# New commanding general off to a busy start

# SMDC's first priority is support to the warfighter

By Debra Valine Editor, *The Eagle* 

**HUNTSVILLE, Ala.** — He took command of the U.S. Army Space and Missile Defense Command Dec. 16 and literally hit the ground running.

Lt. Gen. Larry J. Dodgen, who was promoted to three-star general in a ceremony Jan. 30 in the office of the Chief of Staff of the Army at the Pentagon, has hardly had a chance to sit in his new office in Arlington since he became commanding general of SMDC.

The December and New
Year holidays notwithstanding, Dodgen has been
busy. He made opening
remarks at the Martin Luther
King Jr. presentation in
Huntsville Jan. 14 and was
guest speaker at the Army
Space and Missile Defense
Association's annual
membership luncheon the
same day. He attended the
activation ceremony for the Alaska

National Guard Missile Defense and Space Battalion at Fort Greely, Alaska, Jan. 22 and a ceremony inducting Army Astronaut Brig. Gen. Robert L. Stewart into the Pioneer Hall of Fame Jan. 27 in Colorado Springs, Colo. And these were just his special appearances. He also had the usual bevy of staff briefings — in several geographic locations — and other meetings any new commander attends to learn all he can about his new organization.

But he likes it that way.

Dodgen said his job will continue to focus on SMDC's three priorities: supporting the warfighter, standing up the Ground-based Midcourse Defense Initial Defensive Operations and maturing SMDC's relationship as the Army Service Component Command to the U.S. Strategic Command.

As with any Army commander, readiness is Dodgen's No. 1 issue, with the focus on the Soldier and the Global War on Terrorism.

He said in the near term he wants to make sure SMDC is putting capabilities in the hands of the Soldiers and that they are trained and ready. In the long term, he wants to ensure Soldiers keep their competitive advantage against any potential foes.

"Behind every Soldier out there, there is a whole community that made sure capabilities were tested and their reliability was tested by a great community like SMDC," Dodgen said.

"Once the capability gets to the Soldier, that civilian is on the front line, too, dealing with any problems the Soldier might have."

# First class graduates from GMD course

By Maj. Laura Kenney SMDC Public Affairs

#### PETERSON AIR FORCE BASE, Colo. —

Buoyed by a purpose as visceral as one can get — defense of the homeland — 31 Soldiers graduated Dec. 19, 2003, from the first ever Ground-based Midcourse Defense Operator Advanced Course. They belong to the 100th Missile Defense Brigade (GMD), which was activated here Oct. 16, 2003. Some graduates will move to the battalion in Alaska that will provide operational control over the GMD system's interceptors.



Photo by Capt. Angela Johnson

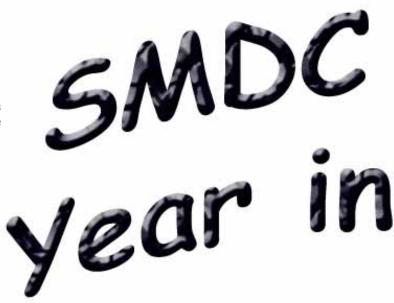
Family member Hannah Zweig, left, Army Space Support Company 1st Sgt. Tim Gore; company commander Maj. Richard Lewis; 1st. Lt. Lauren Schultz and family member Anne Zweig welcome Army Space Support Team 2 home from Iraq.

The graduation ceremony marked the formal recognition of the group's accomplishment. The 12 preceding weeks had often been grueling, but all students worked and learned with a firm sense of purpose — that of being the essential line of defense between great harm and their nation.

The seven-week advanced course followed on the heels of an intensive five-week basic course, which introduced the students to the basic fundamentals of the GMD system.

The advanced course qualified graduates on the fire control system, taking them through day-to-day crises, and combat and recovery operations. The learning definitely didn't stop with the handing out of diplomas.

The goal, according to presidential



directive, is for the system to be operational by Fall 2004, on a timetable sped up by the attacks of Sept. 11, 2001. The brigade will be staffed largely by active National Guard Soldiers, with a small contingent of active Army Soldiers. Colorado Guard Soldiers will man the brigade here, while Guard Soldiers serving at the battalion in Alaska are members of that state's National Guard.

#### March 2004

#### Soldiers, families of 2nd Space Company prepare for deployment

By 1st Lt. Eric Coger Unit reporter

**COLORADO SPRINGS, Colo.** — Space Soldiers deploying to Iraq have become, if not routine, at least something approaching the norm. But the

most recent deployment of 2nd Space Company, 1st Space Battalion Soldiers marked a significant departure from previous rotations. Instead of individuals replacing serving individuals as has been the standard, the unit is now deploying its Joint Tactical Ground Station Soldiers in complete sections.

A section of JTAGS operators left the United States Jan. 14, en route to Central Command in Qatar to support theater operations. As far back as March 2002, JTAGS Soldiers have conducted a continuous mission 24/7 to provide early warning of tactical ballistic missile threats to the Central Command theater. Originally in support of operations in Afghanistan, the Soldiers remained in place and in support of the invasion and liberation of the Iraqi people. 2nd Space Co. Soldiers were rotated in and out of country on a onefor-one basis. Other companies, configured differently, maintained the team structure.

Unlike those earlier rotations for 2nd Space Co., this deployment was teambased and the integrity of the section

was key. The command decided that it was more efficient to build and deploy a team intact, as opposed to the previous method.

## **April 2004**

# General explains missile defense funding request to congressional subcommittee

By Sgt. 1st Class Doug Sample American Forces Press Service

**WASHINGTON, D.C.** — The man in charge of safeguarding the United States against a ballistic missile attack warned members of the House Armed Services Committee's Strategic Forces Subcommittee on March 25 that in the coming

# FY 04 Review

American-style graduation.

The JTAGS-IQT provides the "strength" for forward-deployed JTAGS detachments located in Europe, Korea and Southwest Asia, as well as deployable detachments in Colorado Springs and Texas. The IQT is primed to provide up to 60 operators per fiscal year for use within the JTAGS community.

# New 'Space Age' Operations Center open for business

By Maj. Laura Kenney SMDC Public Affairs

#### COLORADO SPRINGS, Colo. —

Boasting a Star Trek style "bridge" and state-of-the-art technology, the newly remodeled Operations Center here hosted an open house March 17 to mark its transition and symbolically open its doors for business.

The old Operations Center is barely discernible. The new center includes a massively larger and more sophisticated computer server system — two terrabytes from a mere megabyte system, new modem-type consoles, new video cards that display faster and more complex graphics and stainless steel soundproofing panels decorated with star bursts. To date, the facility is 90 percent overhauled.

The goal, according to Deputy Operations Center Director Anthony Hodgkins, is to transform what was already the hub of situational awareness for the U.S. Army Space and Missile Defense Command into a comprehensive center for every aspect of the new missions assigned to the command.

The "Star Trek bridge" centers around a raised dais with a horseshoe shaped master console which places every capability of the Center at the fingertips of the officer-in-charge, with just a spin of the chair. Eight video screens relay situation updates in real time, or capture breaking news on major news channels. Stainless steel panels soundproof the room from the necessary air conditioning. An electronic sign-in computer greets visitors in the anterior lobby to the complex.

The Crisis Action Conference room presents the perfect picture of "wired" with multiple laptop Command, Cheyenne Mountain, U.S. Strategic Command, our own internal command and operations structures, and numerous other commands. In the future we plan to expand to even more databases, and get to the point of all incoming information automatically updating pertinent reports in near-real time."

# The M3P journey begins for 2nd Space Company

By Maj. Charles D. Nesloney 2nd Space Company Commander

COLORADO SPRINGS, Colo. — Since 1997, Soldiers and Sailors have been manning the Joint Tactical Ground Stations (JTAGS) in Europe, the Pacific, the Middle East, Fort Bliss, Texas, and Colorado Springs. These personnel have had the 24/7, 365-day-a-year responsibility of delivering continuous, assured tactical ballistic missile early warning to the warfighter.

Although the existing system has served nobly and well, the time has come for the transition to a more modern and technologically advanced early warning capability. The Soldiers of 2nd Section, Alpha Detachment, 2nd Space Company, Fort Bliss, have the global task to train, test, evaluate and influence the doctrine for the new Multi-Mission Mobile Processor (M3P).

The M3P is the transportable in-theater element of U.S. Strategic Command's Theater Event System. It provides theater commanders a continuous, 24-hour capability to receive and process in-theater, direct down-linked data from Defense Support Program/Space Based Infrared System sensors to disseminate warning, alerting and cueing information on tactical ballistic missiles. It also provides information on other tactical events of interest throughout the theater using existing communication networks.

Between April 2004 and June 2005, 2nd Section, Alpha Detachment will travel to Boulder, Colo. and White Sands Missile Range, N.M. to execute the initial operation test and evaluation. This 15-month mission will not only be the test bed for 2nd Space Company's future operations, but will also

redefine how SMDC/Army Forces Strategic Command interacts in the Theater and Strategic level operations of ballistic missile early warning.

# May 2004

# Schexnayder takes leadership of SMDC-RDA

By Debra Valine Editor, *The Eagle* 

**HUNTSVILLE, Ala.** — The U.S. Army Space and Missile Defense Command's Research, Development and Acquisition function has a

new boss.

Michael C. Schexnayder became the deputy to the SMDC commander for Research, Development and Acquisition in a change of position ceremony April 26.

Schexnayder, the first civilian to hold this position, took over responsibility from Maj. Gen. John M. Urias, who had been dualhatted as the deputy commanding general for RDA and the Program Executive Officer for Air, Space and Missile Defense. Urias moves on to perform PEO duties full time.

years the country will face a ballistic threat from a variety of sources.

Air Force Lt. Gen. Ronald T. Kadish is director of the Missile Defense Agency, which has the task of building the nation's missile defense capability. He told the committee that intelligence estimates and Libya's recent admissions concerning its ballistic missile and weapons-of-mass-destruction programs show the United States is vulnerable.

Kadish was on Capitol Hill to detail and explain the Defense Department's request for missile defense funding in the department's proposed fiscal 2005 budget.

Kadish said the funding would continue an aggressive research, development, test and evaluation effort to design, build and test the elements of a single ballistic missile defense system in what he called "an evolutionary way," along with modest fielding of the capability over the next several years.

# JTAGS initial training lays space groundwork

By Chief Warrant Officer Jeffrey Robinson

**FORT BLISS, Texas** — The Joint Tactical Ground Station-Initial Qualification

Training Course (JTAGS-IQT) is the first station a Soldier, Sailor or Airman has to negotiate in order to operate in a Theater Event System (TES) environment.

"The IQT course is an important part of the space community because it prepares JTAGS operators to disseminate warning, alerting and cueing information of tactical ballistic missiles and other tactical events of interest using existing communications networks in support of the TES and the theater commanders'

missions," said Sgt. 1st Class Ricardo Bonilla, the NCOIC for JTAGS-IQT. The JTAGS-IQT is headquartered at

The JTAGS-IQT is headquartered at Peterson Air Force Base, Colo., but the schoolhouse is located here. The IQT is a seven-week, comprehensive curriculum that includes instruction pertaining to geography, space fundamentals, shelter subsystems, communication systems, preventive maintenance checks and services, and a battery of qualification tests all culminating in a well-earned, all-



Photo by Budd Butcher

Sgt. Antonio Anderson checks with the shift officer in charge, Maj. Ralph Henning, in the newly

computers connected to electronic white boards, and continual video feed from the Center. Not so visible, but a substantial improvement nonetheless is found in the automatic telephonic recall system, which quickly and efficiently enables alerts, 100 percent accountability, bad weather warnings, and the obnoxious but necessary "report for urinalysis"

modernized and refurbished SMDC Operations Center.

"We can maintain 100 percent awareness of the status of our forces, wherever they're deployed. We've got connectivity to Northern

#### **June 2004**

Tech Center director named to University of Texas Dallas' Research Advisory Board

By Debra Valine Editor, *The Eagle* 

HUNTSVILLE, Ala. — The University of Texas at Dallas named Jess Granone, director of the U.S. Army Space and Missile Defense Command's Technical Center, to its Research Advisory Board May 12.

"For SMDC to have somebody appointed to an advisory board at a university is a pretty prominent thing," Granone said. "The people on the board are prominent in their fields. I think this is a feather in SMDC's hat. For me, it is very humbling when I see the names of the people on the board."

#### **July 2004**

# Change of command for STRATCOM

Seaman Ted Green STRATCOM Public Affairs

#### OFFUTT AIR FORCE BASE,

**Neb.** — For the first time in history, a Marine general will lead U.S. Strategic Command.

Marine Lt. Gen. James
Cartwright assumed command
of STRATCOM from retiring
Adm. James Ellis during a
change of command ceremony
at the Allman Maintenance
Facility July 9. Gen. Richard
Myers, chairman of the Joint
Chiefs of Staff, officiated the
ceremony.

#### Missile Defense Agency dedicates GMD site at Fort Greely, Alaska

By Maj. Laura Kenney 100th Missile Defense Brigade (GMD) Public Affairs Office

**FORT GREELY, Alaska** — A ceremony July 3 signified a milestone in the nation's emerging missile defense program.

Maj. Gen John W. Holly, program director for the Missile



Photo by Ralph Scott, GMD Site Activation Command Public Affairs

Maj. Gen. John W. Holly, right, Missile Defense Agency's program director for the GMD program, and Diane Hutchinson, special assistant to the Honorable Ted Stevens, U.S. Senator, Alaska, unveil a monument dedicating the missile field complex at Fort Greely, Alaska.

Defense Agency's Ground-Based Midcourse Defense program, presided over a dedication ceremony that marked the end of the initial construction phase of the missile field complex here.

A monument commemorating the event and dedicating the site was unveiled by Holly and Diane Hutchinson, special assistant to Alaska's U.S. Senator Ted Stevens.

The site will operate and maintain interceptor missiles and related support facilities to provide an initial defensive capability against a limited long-range missile attack against the United States. The system will be operated by the 49th Missile Defense Battalion, 100th Missile Defense Brigade (GMD), U.S. Army Space and Missile Defense Command, in concert with sister services.

# Change of responsibility ceremony held for TRADOC System Manager Groundbased Midcourse Defense

By Marco Morales and Cali Coulthard SMDC Public Affairs

A change of responsibility ceremony for the TRADOC System Manager Ground-based Midcourse Defense (TSM-GMD) was conducted June 21 at the U.S. Army Space and Missile Defense Command headquarters in Arlington, Va.

Col. Jeffrey C. Horne ceded his responsibility to the new TSM-GMD, Col. Deborah H. Hubbard, who last served as the chief, management division/MILSEC, Strategic Plans and Policy Directorate, J-5, Joint Staff, at the Pentagon.

The TSM-GMD is the Army proponent for ground-based midcourse defense and resourced by SMDC and the GMD Joint Project Office. The TSM-GMD, reports to the commanding general, Army Training and Doctrine Command, through the commanding general, SMDC. The role of the TSM is to serve as the single-point interface between the user community or warfighters, including Army, Air Force, and Joint commands, and the materiel developer or acquisition community, primarily the GMD JPO at the Missile Defense Agency.

## SMDC Colorado Springs welcomes new deputy commander for operations

# COLORADO SPRINGS, Colo. — Col. Jeffrey C. Horne became the new deputy commander for operations of U.S. Army Space

and Missile Defense Command and U.S. Army Forces Strategic Command in a welcome ceremony in Colorado Springs, Colo., on June 30.

"What a great opportunity to be here and to serve our Soldiers," Horne said. "This is the fulfillment of a Soldier's dream, and I'm incredibly excited to join such a distinguished, combat-ready, battle-proven warfighting team"

Addressing the members of SMDC/ARSTRAT, Horne said, "I commend your incredible success. You have the greatest, most operationally experienced military, civilian work force and industry support team I've seen. Together you have sent Soldiers to war, performed beyond expectations in all tasks, gotten every Soldier home safely to his or her family, and continue to support space Soldiers. All this was done while simultaneously converting to our role as the Army component to U. S. Strategic Command. This is an incredible set of feats for any fighting force."

# Computer network operations test bed opens

By Kayla Lemoine and Jason Bradford

HUNTSVILLE, Ala. — Military operations are no longer limited to the traditional dimensions of land, sea and air. Technology has taken the realm of warfare into the space and information domains, and Information Operations enhances all aspects of military operations.

The Space and Missile
Defense Technical Center
Computer Network Operations
Team has initiated a threephase IO program to develop
technical facilities and
capabilities to support this
evolving mission. The first
phase is the opening of a local
CNO Test bed.

On June 18, the SMDTC CNO Team, along with Michael C. Schexnayder, deputy to the commander for Research, Development and Acquisition, hosted the official ribboncutting ceremony of the IO/CNO Test bed located in the Simulation Center of the Wernher von Braun Complex on Redstone Arsenal.

The IO/CNO Test bed will be used to provide research, development and assessment



Photo by Kathleen Leona

Tara Ragan, left, deputy director of the Information Science and Technology Directorate, Kayla Lemoine, right, and Johnie Morgan, both with the Information Science and Technology Directorate, watch as Michael C. Schexnayder, deputy to the commander for Research, Development and Acquisition, prepares to cut the ribbon June 18, opening the Information Operations/Computer Network Operations Test bed located in the Simulation Center of the Wernher von Braun Complex on Redstone Arsenal.

of IO technologies for the warfighter with the initial focus on technologies for defending against threats to computer networks and systems. The test bed is currently evaluating and providing feedback to industry on Commercial off the Shelf (COTS) Intrusion Prevention Systems (IPS).

The test bed contains computer networks for testing, evaluating and developing network defense and attack tools, and its flexibility can support a wide range of research and development activities.

The test bed is the foundation for the eventual migration toward a distributed IO test range serving U.S. Strategic Command, 1st Information Operations Command, academia, industry and other government agencies.

# Eagle Vision II upgraded, ready for duty

By Maj. Tim Haynie CET Commander

 ${\bf COLORADO\ SPRINGS,\ Colo.} - {\bf With\ a\ new}$ 

paint job and almost \$2 million in state-of-the-art improvements, Eagle Vision II is ready to take on its new mission: providing commercial imagery support to the Coalition Joint Task Force-7 and Central Command.

Less than six months ago, EVII was just an empty shell on wheels and the Commercial Exploitation Team, 1st Satellite Control Battalion, consisted of only two deployable Soldiers. In the coming months, the U.S. Army Space and Missile Defense Command/Army Forces Strategic Command staff and the 1st Space Battalion would transform the CET into a cohesive, deployable team ready to begin a highly complex and challenging mission set to

improve space support to the warfighter.

Two years ago, Army Space Command anticipated taking delivery of the EVII commercial imagery direct downlink ground station and designed a team to man the system, the CET. Manning and delivery of the system to Colorado Springs began in the fall of 2003. SMDC/ARSTRAT then set to work locating Soldiers and funding to begin the process of breathing life back into the EVII program. To make matters more difficult, many of the components making up the EVII system were outdated, in need of maintenance or simply did not meet the Commercial Exploitation Team's requirements for providing support to the Army.

# Battle Lab systems evolving to meet warfighters' needs

By Debra Valine Editor, *The Eagle* 

**COLORADO SPRINGS, Colo.** — The Space and Missile Defense Battle Lab is using advanced technology and lessons learned to upgrade a space support system that has proven its value to warfighters during



Photo courtesy of Maj. Tim Hayni

Spc. Joshua Foye, left, and Sgt. Kat Estrada set up the Eagle Vision II.

OPERATION ENDURING FREEDOM and OPERATION IRAQI FREEDOM.

Twenty-five Soldiers from across the command trained on the Army Space Support Team-Tactical Set (Dismounted) (ARSST-TS (D)), in June during the 2nd Space Company ARSST-TS (D) new equipment training. The company is part of 1st Space Battalion, 1st Space Brigade. At the completion of training, the ARSST-TS (D) became the property of the 2nd Space Company and will become part of its Modified Table of Organization and Equipment.

The ARSST-TS (D) is the upgraded version of the Space Support Element Toolset-Light (SSET-L). The SSET-L evolved as a portable version of the Space Support Element Toolset that was validated during the Army Transformation Experiment, MILLENNIUM CHALLENGE in July 2002. It was subsequently deployed on short notice to support warfighters in OEF/ OIF. The system improved battlespace awareness, space analysis and commercial satellite communications capabilities for forward deployed space operations officers and their teams. Its capabilities aided in timely and relevant space products (e.g., commercial and spectral imagery) and services (e.g., analysis, estimates, intelligence preparation for the battlespace, etc.) at operational and tactical levels.

#### August 2004

# Exercise tests new technology, builds relationships

By Debra Valine Editor, *The Eagle* 

**TYNDALL AIR FORCE BASE, Fla.** — The Avenger missile tracking system whirred to action long before human eyes could see the drone streak across the bright blue Florida sky Aug. 7.

The drone, picked up by Sentinel radar, was tracked and "destroyed" by the Avenger long before it could reach the exercise target of Headquarters, 1st Air

Force at Tyndall Air Force Base near Panama City, Fla.

Before Sept. 11, the United States did not have the capability to watch the skies for threat vehicles. In the exercise scenario, SMDC Battle Lab employees and partners were looking to change that. Amalgam Virgo 04/Determined Promise is a nationwide homeland defense exercise sponsored by the North American Aerospace Defense Command (NORAD). 1st Air Force is the lead command, Continental NORAD Region, and is responsible for air defense of the homeland.

"This exercise is just a small facet of the larger homeland defense exercise," said Air Force Col. Ed Daniel, vice commander, 1st Air Force. "This is the last line of defense for homeland

security. If the fighter jets do not intercept the threat, it is up to the Avenger.

"We are testing new technologies that are available to us," Daniel said. "A lot of people are working to make the United States more secure. All the agencies are doing yeoman's work to make sure we think of everything."

"We were asked to come down to Tyndall Air Force Base, Fla., and replicate the command and control architecture that would be used by Army ground-based air defense in line with the NORAD architecture. This is a similar structure to what is currently in place at the National Capital Region," said John Buckley of the U.S. Army Space and Missile Defense Command's Battle Lab in Huntsville, Ala.



Photo courtesy of Missile Defense Agency

The first ground-based interceptor is lowered into its silo at the missile defense complex at Fort Greely, Alaska, July 22. The interceptor is designed to destroy incoming intercontinental ballistic missiles before they reach U.S. airspace.

# First interceptor installed at Fort Greely

#### FORT GREELY,

Alaska — The Ground-based Midcourse Defense (GMD) element of the U.S. Missile Defense Agency emplaced the first Ground- Based Interceptor (GBI) July 22 on the Missile Defense Complex at Fort Greely, Alaska.

The emplacement of the first GBI does not mean the missile defense system is operational. This will occur after additional interceptors are emplaced and the interconnected architecture of radars, sensors, battle management and command, control and communications is activated by U.S. Strategic Command, U.S. Northern Command, U.S. Army Space and Missile Defense Command and the Missile Defense Agency.

The emplacement of this GBI, "marks the end of an era where we have not been able to defend our country against long-range ballistic missile attacks," said Maj. Gen. John W. Holly, program director for the GMD Joint Program Office.

Up to five more interceptors will be emplaced at Fort Greely by the end of 2004, with up to 10 additional interceptors emplaced by the end of 2005. The site will operate and maintain interceptor missiles and related support facilities to provide an initial defensive capability against a limited long-range missile attack against the United States.

# Deployment issues top AFAP recommendations

By Marco Morales SMDC Public Affairs

ARLINGTON, Va. — The deployment policy for the surviving dual military parent topped the list of five issues agreed to by attendees at the U.S. Army Space and Missile Defense Command's Army Family Action Plan Conference Aug. 3-6. All five issues will be forwarded to the Department of the Army for further consideration.

Other issues were



Photo by Debra Valir

Darren Woodruff, left, Matt Fapso, Maj. Ted Stevenson, Billy Stinder, Jerome Shumate and John Buckley test the system that provided situational awareness of the air space during the Amalgam Virgo 04 Exercise Aug. 7, at Tyndall Air Force Base, Fla.

stabilization between deployments; transportation of remains for deceased military family members; retirement points for Reserve Component Soldiers; and lack of standardized youth outreach programs to attract high school students to Army careers.

For the first time, SMDC recognized one of its families as the "Great American Family," an award program established in 2004 to recognize the accomplishments and contributions of Army families. Four families were nominated.

The Coleman family from Colorado Springs won the award and will represent SMDC at the Army-level AFAP conference.

# Battle Lab software provides situational awareness for joint experiments

By Debra Valine Editor, *The Eagle* 

HUNTSVILLE, Ala. — Word is getting out in the joint community that the Space and Missile Defense Battle Lab has a plug-and-play environment for providing situational awareness of the battlefield.

Battle Lab teamed with the U.S. Air Force in late July and early August to provide the basic software architecture needed for Project Suter III, an initiative for the Joint **Expeditionary Force** Experiment 04 that took place at Nellis Air Force Base, Nev. Advanced Warfare Environment (AWarE), developed by the U.S. Army Space and Missile Defense Command, is a government-off-the-shelf capability that integrates with commercial-off-the-shelf software and custom software

to enhance battlefield awareness.

Project Suter III seeks to provide Time Sensitive Targets decision makers a coherent and timely view of the information battlespace and sets of interdisciplinary options for gaining and maintaining superiority over it.

# New colors, new era for 1st Space Battalion

# By Karen Butler Unit reporter

In an early morning ceremony July 8, the 1st Space Battalion officially unfurled its new battalion colors after casing the colors of yesterday. Additionally, the officers and Soldiers of 1st Space Battalion replaced their unit crests of old with gleaming new ones.

# Change of command brings Kwajalein new leader

By Jan Waddell Reporter, *Kwajalein Hourglass* 

As one of the Army's first four women to command Patriot Air Defense Artillery battalions, Col. Beverly Stipe comes to Kwajalein with 24 years of experience in missile defense.

Stipe took command of the U.S. Army Kwajalein Atoll July 27, when the command flag passed from Col. Jerry Brown to Stipe.

According to Stipe she has a vision for Kwajalein that will take it in a number of directions. Her priorities are the operation of the missions first, followed immediately by the quality of life for the work force and their families.

# Army Space Support Team members recount their support to Operation Iraqi Freedom

By Maj. Michael Willis, Master Sgt. James Bunch, Staff Sgt. Brett Mills and Sgt. Winston Delgado, Army Space Support Team 12

BAGHDAD, Iraq — Few people are ever close enough to world-shaping events to make a difference. Army Space Support Team 12, a cell from the 193rd Space Battalion, U.S. Army Space and Missile Defense Command/U.S. Army Forces Strategic Command not only witnessed such events, they were instrumental in shaping their outcome.

At the beginning of their journey to Iraq, Team 12 was faced with the war's reality in Baltimore.

"Planes arriving at the base were bringing the bodies of our comrades from action in the war," said Maj. Michael Willis, the Team 12 leader. The team touched down briefly in Moron, Spain, and was impressed with the similarity of it to home.

"I expected it to be extremely hot but it was similar to the hot August days we get in Colorado," Willis said. Then it was on to Baghdad.

#### Life at the Palace

The bleakness of Baghdad was not alleviated by the team's first accommodations.

"We stayed for the first few weeks in a hallway on the north side of the presidential palace," Willis said. "It was nice to be in the air conditioning but the noise from the snoring was deafening. Two British men staying in the same area competed to see who the chainsaw-snoring master was."

Sgt. Winston Delgado played the national sport — football — also known as soccer. The magic of the sport and the power of the football were easily noticed. The route from the palace to the football field was about a half-mile long. The eyes of the Iraqis — adults and children — shined when Delgado walked toward the playing field with his football. Everyone wanted to play. It is a favorite sport in this part of the world — inexpensive in America, but could be costly for many people here.

"Eventually we were given rooms in the Al Rasheed Hotel." Willis said.
"As a group we were a bit leery of the place as a target, but we decided it was better than the palace hallway." The team's feeling about the place turned out to be prophetic.

#### Attack on the Al Rasheed

"On Oct. 26, 2003, around 6:20 a.m., the hotel was attacked by a homemade rocket launcher that was mounted on a generator with forty 120 millimeter rockets," said Master Sgt. James Bunch. "Nineteen rockets hit the west side of the hotel."

"The first rockets that struck the building woke us up," said Mills. "They left the floors covered with broken glass and dark, heavy clouds of dust and smoke in the hallways." An immediate search began to locate all team members and to help anyone in need.

There were also two members of the Spectral Operations Resource Center — Sgt. Sean Moudy and Gene Walacavage — staying in the hotel.

In the pandemonium of the smoke- and debris-filled building, the team located

Walacavage, who had been seriously wounded in the eyes by flying debris and had a chunk of concrete embedded in his arm. Walacavage and Moudy were extremely lucky that day; one of the rockets entered the window of their room, flew directly over their heads as they lay in bed and penetrated the bathroom wall where it fell into the sink — a dud.

While Willis and Capt. George O'Neil, a Team 12 member, gave Walacavage immediate care in their room, Bunch carried a woman to the medics. Her arm had been nearly severed by one of the blasts. Team 12 member Staff Sgt. Brett Mills' room was on the 10th floor. A rocket blew out almost every door in that part of the building. Mills, wearing his jeans, a Harley long-sleeved shirt, his armor vest and his loaded pistol calmly strode out of his room and immediately began moving people off the floor and out of the hotel to safety. His room-to-room search led him



Photo courtesy of Gene Walacavage

A rocket-propelled grenade entered Spectral Operations Resource Center members' Gene Walacavage and Sgt. Sean Moudy's room through this window during an attack on the Al Rasheed Hotel in Baghdad, Iraq, Oct. 26, 2003.

to the end of the hallway where he found a room with the door jammed shut. He could hear a woman screaming inside. Unable to knock the door down, Mills went out the window of an adjacent room and slithered along the outside of the building until he was able to enter her room. He helped the woman out by retracing his steps and once she was on her way to safety, he cleared the rest of the rooms on the floor with the help of a Marine, who was the chief of hotel security.

The Marine and Mills moved to the 11th floor and found an injured officer in a room that had been hit by a rocket. Mills attempted to administer first aid but the man was not doing well.

"When the medics arrived they could not start an IV because the injured officer's veins had collapsed," Mills said. Mills, the medics, and Bunch carried the wounded man to the lobby. The medics did all they could to stabilize the man but he later died.

During the time that the Marine and

Mills were working on the evacuation of the building, the rest of Team 12 was caring for Walacavage. Their rescue was captured on national TV as they carried the wounded civilian to an ambulance.

#### Saddam's Capture

Sunday, Dec. 14, 2003, brought an early Christmas present for everyone stationed in Iraq. It was the day Saddam was captured. Brig. Gen. Mark Kimmit, deputy director of operations, Combined Joint Task Force 7, tasked the team to produce data and imagery for the press release.

"The team did many jobs like that for the general during its tour of duty, including capturing images of the deaths of Uday and Qsay Hussein, the apprehension of terrorists and wanted posters for high-ranking Baath party members and terrorists," said Willis.

#### **Visiting Babylon**

One of the highlights of the Team's time in Iraq was a visit to Babylon. It was not long after their arrival in country that the team went to deliver space products to the Coalition Provisional Authority's south central headquarters.

Babylon "was one of the sites where Saddam wanted to begin his climb to become the modern-day Nebuchadnezzar by rebuilding Babylon and the hanging gardens," Willis said. He added that the site had been picked clean over the centuries and that the best artifacts now reside in museums in Germany, England and Baghdad.

"The Great Gate of Ishtar, minus the arch, still stands. The lions and dragons are still visible, embedded in the brickwork. This gate has seen an untold number of people of all kinds pass through over the centuries. The archaic script that dedicated the gate being built by Nebuchadnezzar can be clearly seen today," Willis said.

The Space Support Cell in Iraq consisted of both military and civilians. They supported the CPA in the planning, reorganization and reconstruction of the oil, gas and electrical grids. They also supported efforts to rebuild the water grid, the prison system, schools, government buildings, sports complexes, local neighborhood housing areas, roads, museums and historical ruins. Space cell products were also used to fight

and find insurgents, former Baath party members, weapons caches and terrorist safe houses.

Space Support Cell members also showed ordinary Iraqis some of the marvels of modern technology — such as a digital camera that became an instant hit. Under Saddam Hussein, photos of ordinary folks had been forbidden. Bunch made copies of photos for Iraqis he supervised on a work detail and became an instant hero. The Iraqi foreman on the detail told him that the small gesture of printing some photos was an immeasurable gift to those Iraqis present.

Bunch summed up the Iraqi experience in mission-oriented terms. "We went through many difficult challenges, both personal and technical. The technical issues were caused by poor power service and a congested communications network. However, with perseverance, trouble-shooting skills, and the assistance of everyone supporting our team — we were successful."

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# Second force protection exercise challenges Fort Greely Soldiers

By Sgt. Sara Storey 100th GMD Public Affairs

#### FORT GREELY. Alaska -

Soldiers from the 49th Missile Defense Battalion (Groundbased Midcourse Defense) here participated in the second Force Protection Exercise Sept. 14-16.

The unit is part of the nation's emerging missile defense program designed to protect the United States from ballistic missile attacks. The program is scheduled to have limited defensive capabilities this fall.

This Force Protection Exercise was the second of three, designed to test security forces assigned to guard the Missile Field Complex. According to Sgt. Maj. Ramon Martinez, exercise observer/ controller, this exercise was a continuation from the last one.

"The exercises are specifically designed to better train and test the security forces by making each exercise more difficult and challenging than the previous one," Martinez said.

Some of the difficulties faced by security forces during this exercise were cold weather,

sustained 48-hour operations and reaction to a more determined group of protestors who had a history of destructive behavior.

Mock protesters Soldiers from the Alaska Army **National Guard** who volunteered to participate picketed along the fence line of the Missile Field Complex while Department of the Army civilian police and 49th **MD Battalion** security forces guarded the area.

Before the exercise, Soldiers received training on the Rules of Engagement (ROE) and Rules of Use of Force (RUF) in a peacetime, non-armed conflict from Maj. Michael Burmeister, Space and Missile Defense Command, operational law attorney. Burmeister conducted several small-group training sessions before the first exercise in August.

The RUF provides for the use



Department of the Army civilian police keep mock protestors from entering the Fort Greely, Alaska, Missile Field Complex during the Force Protection Exercise Sept. 14-

of deadly force if necessary, as a last resort, to defend property designated as vital to national security or to protect people from serious injury or death.

The ROE is used when performing operations in combat situations or defending against an attack against the United States, according to Burmeister.

"This exercise built on previous training," Burmeister said. "Using the ROE and RUF properly requires security forces to think on their feet this is a job for highly motivated and intelligent people. These Soldiers have shown dedication and haven't been responding with kneejerk reactions — they've been thinking things through and properly using what they've been taught."



#### Students participate in Adventures in Engineering Day

More than 100 local high school juniors from 11 schools participated in the Huntsville Area Technical Society's '2004 Adventures in Engineering Day' Sept. 22. The intent of this oneday event is to encourage the students to consider the possibility of pursuing careers in science and engineering. The SMDC-hosted portion of AIE took place at the Advanced Research Center in Cummings Research Park, with students having the opportunity to try their hands on two SMDC technologies during their visit, the Advanced Warfare Environment (AWarE) System and the Technology Concepts Evaluation Learning Lab (TCELL). Students also were briefed and saw the model for a 100-kilowatt solid state laser weapon integrated on an actual hybrid electric High Mobility Multi-purpose Wheeled

SMDC's fourth annual Security and Safety Awareness Day

# **Uncertain times** requires action

s the Global War on Terrorism continues, the theme of "Security and Safety Strategies for Uncertain Times" seems particularly appropriate for this year's U.S. Army Space and Missile Defense Command annual Security and Safety Awareness Day. The event is scheduled for Oct. 27 in Colorado Springs; Nov. 10 in Huntsville, Kwajalein Atoll and the High Energy Laser Systems Test Facility; and Nov. 17 in Arlington. Each command location will separately publish its own individual agenda of speakers, displays or other security and safety activities. Attendance at the Security and Safety Awareness Day activities is mandatory.

Media coverage of Homeland Security efforts and military operations overseas keeps the workforce focused on the need for operational security, however, SMDC is still vulnerable to espionage threats that use both traditional means and newer techniques of computer crime (e.g., e-mail worms, counterfeit Web sites and criminal activity.)

In order to meet the Command challenges of the 21st Century, it is important to integrate both security and safety into the planning and execution phases of all operational missions and research, development and acquisition programs.

Security and Safety Awareness Days are held to keep SMDC employees aware of the importance of the application of security, operations security and safety measures during daily planning and execution processes.

# **Civilian News**

# Long-term care enrollees urged to use coordination

Though many enroll for the Federal Long Term Care Insurance Program (FLTCIP), very few know what long-term care is and how to get the greatest benefit from it, an official said. Launched in March 2002, the program is the largest employer-sponsored longterm care insurance program and the largest group program in the country. To avoid the emotional toll on caregivers charged with making decisions about a loved one's care, one suggestion is to utilize the program's care-coordination services to develop a plan for the future. Having an idea of what is available before there's a critical need can alleviate some of the stress involved in decision making. Coordinators, all registered nurses who have worked in long-term care situations previously, are available to assist with that process. They can provide general information, assessment and approval of the need for long-term care and help develop a care plan. The FLTCIP program provides over 20 million eligible enrollees access to long-term care insurance as a voluntary benefit, meaning the employee pays all

#### Updated emergency guides released

The Office of Personnel Management (OPM) recently released updated emergency guides for federal employees and managers that further spell out the responsibilities of federal agencies to prepare for an emergency event. "These guides, containing updated information, ensure that federal workers are fully prepared within their own facilities," said OPM Director Kay Coles James. "I encourage employees to download the new guides and re-familiarize themselves with safety protocols." The two updated emergency guides now provide guidance on telework arrangements, designation of emergency personnel and shelter in place protocols. In addition to the guides for federal employees and managers, OPM also produced a national and Washington, D.C., specific emergency preparedness guide for families. The guides can be found at www.opm.gov/emergency.

# Annual Combined Federal Campaign in full swing through Dec. 15

The 2004-2005 Combined Federal Campaign is now through Dec. 15. Last year, federal workers donated nearly \$250 million during the campaign. The campaign was established in 1961 and is the largest workplace charity campaign in the country, according to officials. This annual fall fund-raising drive allows nearly 4 million federal employees to contribute to thousands of local and national nonprofit organizations. On average, one in four federal employees or their family members will benefit from the CFC charities this year alone, according to officials. Donors may designate which charity, or charities, receives their money by filling out a pledge card. Contributions can be in cash, check or by payroll deduction. The CFC Web site at www.opm.gov/cfc has more information.

# Volunteers needed to assist with eCYBERMISSION

eCYBERMISSION, the Army-sponsored science, math and technology competition for youth, needs volunteers to serve as cyber guides, ambassadors and installation points of contact for this year's competition. Volunteers are generally Army personnel who must have an active security clearance. Applications are accepted year-round. The program's mission is to generate interest among youth in science, math and technology and to communicate how important these areas are to the future success of our nation. Teams of three to four students, in grades six through nine, compete for monetary prizes and the opportunity for national recognition. Teams design projects that incorporate science, math and technology in the areas of health and safety, the environment, sports and recreation, and arts and entertainment. The program started two years ago and has grown from 903 teams competing during the first year to 1,624 teams this past spring. Officials estimate that the number of teams competing this year may exceed 2,000. Anywhere from 400 to 600 volunteers will be needed. To learn more about the program and to register as a volunteer, visit www.ecybermission.com. For more information contact Kelly Davis at (256) 955-2017.

# Military News

# New program aims to help military spouses interested in teaching

Spouses to Teachers (STT), DoD's latest endeavor to assist military spouses interested in teaching, is serving a similar purpose as the popular Troops to Teachers (TTT) program. STT is currently a pilot program in six states: California, Colorado, Florida, Georgia, Texas and Virginia. The program was prompted by military spouses who were already teachers or interested in teaching, but were facing difficulties finding certification requirements and job information when they moved. The program will offer information, counseling and guidance to eligible, interested individuals. Initially, eligibility is limited to those with a bachelor's degree who are spouses of active duty service members and members of the Selected Reserve or Individual Ready Reserve on extended duty. It will also offer limited financial assistance to help defray the costs of meeting state certification requirements in the pilot states.

#### TRICARE improves information access

In an effort to improve the way service members access the information regarding their benefits, TRICARE's new contracts have recently undergone a few changes. Gone are the local numbers that one would call to find out information about benefits. Now any member can call a regional line for TRICARE South. The process has been simplified, making it easier to get an appointment that is more convenient for an individual rather than just when an appointment is open. In the past, a doctor wrote a referral and the active duty members were not able to make their own appointments, but now they can. Individuals will be sent a letter from Humana Military Healthcare Services stating that their referral has been approved, and from there it is in the individuals' hands to set an appointment. In addition to the changes made to access beneficiary information, TRICARE members in the local area can also call an after hours Nurse Information Line, which allows for 24-hour Primary Care Provider contact and access to information that may save the member and the hospital time in assessing the kind of care necessary. For more on TRICARE benefits, visit our TRICARE Overview section: http://www.military.com/Resources/ResourcesContent/ 0.13964,30822,00.html.

#### Commissaries OK Internet coupons again

The Defense Commissary Agency now accepts coupons printed from the Internet, after refusing the printouts for nearly a year. According to a DECA press release, the commissaries stopped accepting the coupons last September because fraudulent use of them was costing the grocery industry as a whole millions of dollars. Although the Web coupons are accepted now, there are limitations. They must have bar codes, and no Internet coupons for free items can be redeemed. The coupons can be found on www.military.com or at Web sites for product manufacturers. The commissary also will have links to Internet coupon sites in the future at http://www.commissaries.com.

# Health benefits for military families aren't 'automatic'

Department of Defense TRICARE officials are working to inform military families that non-active-duty beneficiaries must enroll in the health care system before they see a doctor. Active-duty service members are automatically registered in the Defense Enrollment Eligibility Reporting System (DEERS). However, this isn't the case with family members, who must personally ensure they are properly enrolled in DEERS to be eligible for TRICARE benefits. This is a step many families forget each time they transfer or travel. There are several instances where a military family must update its DEERS enrollment information. These times include marriage, the birth or adoption of a child, divorce or retirement. Children over 21 years old who have a student status must also be registered in DEERS. Active-duty service members can make these changes by completing a DD Form 1172 (Application for Uniformed Services Identification Card and DEERS Enrollment). Sponsors and their families should contact the nearest uniformed services identification card facility to learn what documents are needed to register or update DEERS information. To find the closest facility, search by ZIP Code at http://www.dmdc.osd.mil.

### Best of the Best compete in DA competition

# Teamwork causes SMDC Soldier and NCO to shine

By Sharon L. Hartman **SMDC Public Affairs** 

**ARLINGTON, Va.** — A grueling weeklong competition brought the best **Noncommissioned Officers and Soldiers** from 10 major commands across the Army to Fort Lee and Arlington, Va., to compete for the honor of being named the Department of the Army NCO and Soldier of the Year. The contest had 10 NCOs competing for one title and 10 Soldiers competing for the other. Staff Sgt. Curtis Kimbrell was one of those NCOs and Spc. Daniel Everly was one of the Soldiers.

Kimbrell and Everly represented U.S. Army Space and Missile Defense Command/U.S. Army Forces Strategic Command with pride, dedication, courage, spirit and teamwork that were unmatched during the competition. Kimbrell, the assistant training NCO for the 100th Missile Defense Brigade, and Everly, a

joint tactical ground station operator, displayed a level of physical, mental and spiritual ability that inspired competitors and spectators alike.

Having met less than a month ago to train together for the competition, they built a bond that strengthened as the competition progressed. Nearly every event found them side by side encouraging and supporting one another. The only two competitors to cross the finish line of the 6-mile ruck march together, Kimbrell and Everly demonstrated that although each competitor was battling for their own title, the Army is and will always be about teamwork and camaraderie.

The winners of the competition were Staff Sgt. Andrew J. Bullock of U.S. Training and Doctrine Command (NCO of the Year) and Spc. Wilfredo A. Mendez with Eighth U.S. Army (Soldier of the



Spc. Daniel Everly, left, and Staff Sgt. Curtis Kimbrell evacuate a casualty during one of the events at the Department of the Army NCO and Soldier of the Year competition held Sept. 11-17 at Fort Lee and in Arlington, Va.

# Contracting team recognized for work in Iraq

**SMDC Public Affairs Office** 

**HUNTSVILLE, Ala.** — Rebuilding Iraq is going to be a long, complicated process. But thanks to the work of Mark Lumer, chief of the Contracting and Acquisition Management Office, U.S. Army Space and Missile Defense Command, and his team of contract specialists, the effort is under

Lumer received an award from Paul Wolfowitz, deputy secretary of defense, Aug. 24 at the Pentagon. The award recognizes individuals and teams who recently supported contracting efforts in the ongoing mission to rebuild Iraq.

"This award is nice to receive, but to me it represents all the hard work my team did in the effort to help reconstruct Iraq," Lumer said.

Lumer spent eight months working on Iraqi contracting six of which he served as the assistant deputy assistant secretary of the Army (Policy and Procurement)-Iraq. Leading a team of 20 people, he was responsible for setting up policies and procedures for

contracting operations in Iraq that included revising Iraqi contracts and coordinating and providing assessments for the secretary of defense.

Most of the contracting work is now done in Baghdad with satellite offices in Washington,

The first two Army contracting officers have been in place since June 2003. The office has now grown to as large as 55 people. They come from all the services, military and civilian.

"They have gone from zero to \$7 billion in obligations," Lumer said. "If you count the Iraqi dollars being spent, it is closer to \$25-30 billion. It is as joint a contracting effort as you will ever see.

"My office in the Pentagon worked principally with the policy side of getting Iraqi contracts awarded as well as primary interface with the media, Congress and foreign governments," said Lumer, whose office handled a combined average of 13 congressional, governmental and media inquiries a week.

He spent a good deal of time

talking to foreign ambassadors and trade ministries about how the **United States** negotiates contracts.

"I explained to them that we do not play favorites. That we use competition as much as is practical."

While in Iraq, Lumer headed up two different assessment teams — one for the Secretary of the Army and one for the Secretary of Defense — to determine how well the United States

was supporting Iraqi reconstruction.

"In both cases, it was the same," Lumer said. "Both teams were doing incredible jobs working 14-hour days, 7 days a week without a lot of resources.

"We hired a lot of local Iraqi contractors and issued almost every single procurement on a competitive basis," he said. "We saw unusual problems that you do not usually see in the United States because there is no active banking system in Iraq. Contractors were paid in cash. And it would not

be unusual to have a contractor receive \$100,000 or more in stacks and for him to take it out of the Presidential Palace in the Green Zone of Baghdad in a big paper bag."

During a ceremony Aug. 24,

recognizing individuals and

ported contracting efforts in

teams who recently sup-

the ongoing mission to

Paul Wolfowitz, deputy

secretary of defense.

rebuild Iraq, Mark Lumer

received this award from

Lumer recalled a story of a local contractor.

"One of our contracting officers had contracted with a local firm to do some work for about \$25,000," Lumer said. "The company performed the work and when the job was finished, the contracting officer counted out the money and gave it to the representative from the company. The guy just stood there.

"Our guy said, 'This is your money, thank you.' The other guy just stood there. When the guy continued to stay there, our guy asked him what he was waiting for. He said, 'I am waiting for you to take your cut.' Our contracting officer explained to the Iraqi man that our system did not work that way; when a company is told it will be paid so much money for

work, that is what they get paid. There is no payoff. The Iraqi man couldn't believe it. The man kissed the contracting officer on both cheeks, took his money and left. That is indicative of how badly these companies were

> abused by Saddam Hussein and his sons. It will take a while to get things back on an even keel."

The contracting effort in Iraq has been substantial.

"The \$18.4 billion appropriated budget is more than some cabinetlevel departments get," Lumer explained. "We have spent more than \$6 billion in construction. They are in the process

of spending an additional \$6 billion in non-construction. There is \$4 billion in reserve that will probably end up on new contracts. The State Department has spent \$2 billion on democracy building. It is a gigantic contracting effort across the board

"In non-construction procurements, you are looking at a country that has had little or no investment in 35 years," he continued. "The electrical substations are vintage 1955-65. As another example, Saddam Hussein had all the street signs in Baghdad removed when he realized we were coming in. Unless you know where you are going, you will never get there.

"It is a country the size of California that is in total disrepair. If you can think of a product or service, they need

(Debra Valine and Marco Morales contributed to this article.)



Mark J. Lumer, left, chief, Contracting and Acquisition Management Office, U.S. Army Space and Missile Defense Command, accepts a Congressional Record certificate from Congressman 'Bud' Cramer of Alabama's 5th Congressional District during a short visit to Cramer's office Sept. 8 in Washington, D.C.

# Military analyst, Frontiersman enjoys reliving days of early America

By Debra Valine Editor, *The Eagle* 

ohn Robinson is a military analyst for missile defense in the Space and Missile Defense Battle Lab in Huntsville, Ala. In his spare time he's a Frontiersman known as HighLand Spirit.

Similar to Civil War reenactments — without the battles — or recreation of medieval times, the Frontiersmen Camping Fellowship focuses on the time frame from the colonization of America up to 1850. The group — made up of men and boys is part of the Royal Rangers, a Christian boy's ministry centered around outdoor activities such as hiking, caving and rafting.

Robinson got involved with the Frontiersmen and Royal Rangers through his church in 1993. He's a commander in the Royal Rangers at Weatherly Assembly of God Church, Outpost 182. Older boys and commanders in the Royal Rangers can get into the Frontiersmen Camping Fellowship once they have earned certain merits, such as fire building, rope craft, lashing, camping, cooking, etc.

The Royal Rangers reach out to boys through camp outs. At

the camp outs there are fun activities and competitions between patrols of different outposts (churchs). First, second and third place patrols are normally recognized with prizes or trophies. Other camp outs allow the boys to work on their merits for advancement within the organization.

"The older boys and commanders of the camping fellowship have separate camp outs that also have competitions with tomahawk throwing, setting traps, and outfit (costume)," said Robinson, who won for best outfit in the Voyager category and tied for best overall outfit

at the National Rendezvous in July at Eagle Rock, Mo. The National Rendezvous is held every four years.

"The outfits are as authentic as possible, for instance, no polyester. It takes time to put a good one together." Robinson spent four years thinking about the costume he would wear at the National Rendezvous.

"It wasn't until a couple of months before the rendezvous this year that I really got busy getting things together," he

said. "I handmade a leather rifle case, acquired a handmade toque (a stocking cap) and a hand-forged tomahawk, made a tomahawk cover, and acquired a flintlock canoe gun."

Robinson got involved with the group because he loves children and likes working with them. "The frontier aspect of the ministry was just icing on the cake. To me working with the boys is the most fun part of Royal Rangers," he said.

"We bring in a lot of kids who do not have fathers or male role models," Robinson said. "One thing that makes an event successful for me is being able to sit down and spend time with some of the boys. It's amazing how quickly you can see a child change once they know you really care about them. Boys from all walks of life need attention and positive role models. Some seem to be hard cases, but once they know you care, it makes all of the difference in the world.

"I love working with the boys and helping them to learn some of the crafts or teaching them something that I have learned about the frontier," Robinson said. "FCF is not only a ministry for me, but has grown into my hobby. I try to read as many historical documents and books as I can, attend historical events and visit historical places, all to better my understanding of the way things were in times gone by. I have learned a great deal over time and I know I have a great deal more to learn. I find it fascinating."



Courtesy photo

John Robinson, left, wears his winning Voyager outfit at the National Rendezvous at Eagle Rock, Mo., in July. With him is Skip Terry.

# **RDA** realignment

#### continued from page 1

as well as matrix management personnel from the RDA staff.

"We are going to make the matrix operation a core business area," Schexnayder said. "We have 175 people matrixed and co-located with other agencies. I want them to have strong roots and two places to call home — SMDC and the program being supported."

The RDA staff itself also will undergo some change. The Joint Center for Technology Integration will move to the Integrated Capability Management Staff while the Command Analysis Division and RDA front office staff will remain the same.

"I need all of you to make this happen," Schexnayder said. "We have a small number of people — counting those at Kwajalein, it is about 600 people. We are required to have about

900. We can grow to 900 if we have the funds required and mission related work."

RDA's mission focuses on three areas: create and transition technology; plan and conduct space, missile defense and high energy laser test and evaluation; and provide selected space intelligence.

The strategy to be successful in those mission areas is to:

- Focus on the mission by choosing the right customers; aligning, integrating and synchronizing RDA major subordinate element efforts; and delivering maximum customer value.
- Increase support to the warfighter by increasing interaction with Army Forces Strategic Command, combatant commands, and the U.S. Army Training and Doctrine Command to define and quantify warfighting capability gaps, force concepts and architecture using the Doctrine, Organization, Training, Materiel, Leadership, Personnel and

Facilities (DOTMLPF) approach and the associated military value provided; capturing the associated materiel technical performance requirements and move to provide materiel solutions. Increase technology transfer efforts to provide capability to current forces. Collaborate vigorously with other services and organizations to speed technology transition and capability availability.

• Dramatically increase both individual and team capability and competence by focusing on the system and technology areas that support SMDC missions.

"As we add more value to the customers — whether they are in the joint world or the Army — we will try to get the additional people to perform our mission," Schexnayder said. "I think we are too small to do what we need to do."

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# U.S. Strategic Command master chief 'impressed' with SMDC

By Marco Morales SMDC Public Affairs

n these first few months as the U.S. Strategic Command's Command Master Chief, I've had the opportunity to visit numerous the Army Service Component Command to STRATCOM met and spoke candidly with Soldiers and civilian employees of SMDC during his visit in mid-September. Nissen also toured SMDC's Colorado Springs operations



Sgt. 1st Class Dennis Beebe

Sgt. 1st Class Kenneth Tompkins, right, briefs the 1st Satellite Control Battalion's part in the overall SMDC mission to STRATCOM's top enlisted leader, Command Master Chief William N. Nissen, center, while the 1st SATCON's Command Sgt. Maj. Reginald Williams looks on.

commands that support the various missions of STRATCOM, and I can tell you in all honesty I've been absolutely impressed with the enthusiasm, motivation and professionalism," said Command Master Chief William N. Nissen, the senior enlisted leader and adviser to the commander of STRATCOM.

STRATCOM is the combatant command responsible for global command and control of U.S. strategic forces to meet decisive national security objectives.

Nissen, escorted by Command Sgt. Maj. David Lady, command sergeant major for the U.S. Army Space and Missile Defense Command — where he was escorted by Command Sgt. Maj. Lester Bailem, command sergeant major for the 1st Space Brigade.

"I believe it is my obligation to meet and talk with as many of our professional warriors as I can — to see what they do, to hear what they think and how they feel, and to attempt to provide them with an understanding of the way ahead," Nissen said.

Nissen addressed one of the greatest challenges facing enlisted personnel in their joint support role to STRATCOM.

"I believe our biggest challenge is the necessity to accept and embrace change as we transition from serviceoriented support and mission accomplishment to joint componency and distributed execution," he said.

"Primarily, we need to ensure our enlisted warriors understand the vision of STRATCOM mission areas transitioning to jointly manned components vice single-service or agency component commands. I would also reinforce that as joint components accomplishing day-to-day operations, enlisted Soldiers, Airmen, Sailors and Marines with like skill sets, will operate, learn and grow side by side."

Nissen commented on his view of the enlisted warrior in the joint arena.

"Each of our services is rich in history and traditions, which we expect our enlisted service members to embrace," he said.

"Enlisted warriors assigned to a joint command have unique responsibilities. They are required to demonstrate 'dual loyalties,' loyalty up and down the chain of command as well as loyalty to their respective service. But, it is the 'team' comprised of relationships built across service lines, both personal and professional, that is the key to mission accomplishment. STRATCOM warriors are expected to take the lead, set the example, and strengthen the team. All our Soldiers, Sailors, Airmen and Marines are a team for our country."

Nissen further defined the joint environment commonality associated with STRATCOM's overall mission.

"As I understand it, the

vision is that across service (and agency) lines, component commanders will provide the STRATCOM commander with the skill sets and tools necessary to successfully execute the mission," he said, adding, "Whether the mission at hand is global space operations, global strike, DoD information operations, C4ISR (command, control, communication, computers, intelligence, surveillance, and reconnaissance), or global missile defense.

"I view organizing jointly manned components as an enabler to the enlisted warrior," Nissen said. "Under this concept, they may well be equipped with tools and information technology not currently available to them in the service/agency oriented construct. Rather, they would have the ability to reach across service/agency lines to share pertinent research, information, technology and experience.

"If we continue down the path of joint componency, our warriors will be serving with those of other services and agencies, military and civilian alike, with like skill sets, all focused on mission accomplishment," he said.

Nissen said he plans to continue visiting the various commands and agencies that support STRATCOM.

"Visiting with our enlisted warriors invigorates me," he said.

"I believe I am obligated to know and understand them, their missions and their issues."

# Archives not destroying military personnel files

By Jim Garamone American Forces Press Service

**WASHINGTON, D.C.** — The National Archives and Records Administration is not destroying any military records, officials here said.

The agency is trying to counter an Internet rumor that advised veterans to apply for their official military personnel files to save them from destruction.

There is no truth to this "urban legend" being perpetuated on the Web.

"We heard it about a month ago," said Susan Cooper, the archive's public affairs officer.

The records are stored at the National Personnel Records Center in St. Louis, Mo.

Officials there said that there has been an uptick in the number of veterans requesting their records. This takes time away from other legitimate requests — such as veterans requesting separation documents or medical records.

"We have a limited number of people to do the work and anything that ramps the requests up this quickly is a big production issue with us," said John Constance, NARA's director of congressional and public affairs.

Archivists are digitizing some records, Cooper said.

"We are going to digitize some of them for reference and preservation," she said. "When records are handled frequently, it causes some wear and tear. The idea is to preserve the records, not destroy them." Officials emphasize that the paper records remain intact.

NARA preserves and protects the files because they are permanently valuable records that document the essential evidence of military service for veterans.

Bottom line: If you receive this sort of email, ignore it. Your military records are

For more information go to the National Archives and Records Administration Web site at http://www.archives.gov or the National Personnel Records Center Web site at http://www.archives.gov/facilities/mo/st\_louis/military\_personnel records.html.



# Food important to quality of life

Lt. Gen. H. Steven Blum, right, chief, National Guard Bureau, visits with Fort Greely's commissary director, Rick Stillie, during a visit to Fort Greely, Alaska, to check out the quality of living for 49th Missile Defense Battalion Soldiers.



Photo by Sgt. Sara Storey, 100th Missile Defense Brigade (GMD)

# Force Protection exercise tests Satellite Control Soldiers

By Chief Warrant Officer 2 Anthony Kellar Unit reporter

**SCHRIEVER Air Force Base,** 

Colo. — At 5 a.m., Capt.
Daniel Gager, commander,
Headquarters and
Headquarters Company, 1st
Satellite Control Battalion,
placed his unit on full alert.
Soldiers immediately reacted
in response to his order to
form up at the Defense
Satellite Communication
System Certification Facility,
located at Schriever Air
Force Base, Colo. They were

deploying for an exercise. Little did these Soldiers know, they were going to find themselves conducting squad-level techniques at Camp Gearnsey in Wyoming.

The Soldiers from HHC 1st Satellite Control Battalion, deployed to Camp Gearnsey with units from the U.S. Air Force for a joint force protection exercise. The exercise began with a deployment briefing by the commander of the host Air Force unit.

During the three-day training their tactical expertise in squad-level techniques was greatly utilized throughout the exercise to support this specialized training for the Air Force personnel. Soldiers showed Air Force personnel how to communicate and fight effectively during movement to contact, urban building defense, hostage retrieval, and garrison security. The Soldiers were not there only as instructors or facilitators — they also learned many new techniques of deployment during the exercise.

Security Forces' personnel taught Soldiers and Airmen techniques that no Soldier of the organization had learned before. The Soldiers learned personal apprehension techniques, emergency scenario containment and M-9 weapons retention techniques. The Soldiers of HHC also squared off for hand-to-hand combat simulation and utilization of the M-16 rifle as a hand-to-hand combat apparatus.

Physical training did not suffer in the field. All Soldiers were required to perform a "five and dime" upon both entry and exit from the local dining facility. The "five and dime" consisted of five pull-ups followed by 10 push-ups. When released at the end of the day, Soldiers played



Photo by CW2 Anthony Kellar

Soldiers from Headquarters and Headquarters Company, 1st Satellite Control Battalion, Schriever Air Force Base, Colo. and Airmen take position toward opposing forces.

motivational football games and then moved back to their rooms for "push up poker." Instead of ante for change, the ante was push-ups. Some hilarious outcomes with 80 push-up antes resulted by the end of the game. The Soldiers commonly played poker until midnight and still got up at 5 a.m. for the next day's training events. Spc. Kenneth Vaillancourt said, "I am new to the unit. It was very motivational to be doing the five and dime and to watch the Air Force personnel get into it. It was a great exercise for all personnel involved."

The training culminated with a field training exercise where Multiple Integrated Laser Engagement System (MILES) gear was issued with weapons and blank rounds. Personnel were deployed to a fighting location and fought against opposing forces. Many combat techniques were taught throughout the exercise, to include, the low crawl, high crawl, and bounding over-watch. Gager acted as the unit commander during the movement-tocontact scenario. His class was "textbook." He issued the warning order to the team leaders, conducted a reconnaisance and then conducted a rehearsal of the attack scenario with all participants. During the ambush, all opposing forces personnel were eliminated while only losing 25 percent of his unit.

This was the kind of exercise that

everyone learns from, Gager said when asked about the experience. "We were fortunate to have the Air Force troops to teach us some containment techniques and more police oriented tactics. I think they got a lot from going through our tactical exercises too."

For many Soldiers, protecting a convoy was an incredibly interesting portion of the



Photo by CW2 Anthony Kellar

Spc. Pedro Meza, Headquarters and Headquarters Company, 1st Satellite Control Battalion, Schriever Air Force Base, Colo., waits for the enemy during a three-day force protection exercise at Camp Gearnsey, Wyo.

exercise. The Soldiers and Airmen were attacked during a simulated movement.

"It was absolutely fantastic," said Spc. Charles Strauch. "By the time the exercise was over, even the Air Force personnel were shouting 'Hooah!"

The exercise was not just a training event for the Soldiers. It was also a great chance for Sgt. 1st Class Kenneth Tompkins, the new HHC first sergeant, to see his Soldiers and NCOs in stressful leadership situations.

"Going into the exercise, I expected great things from my Soldiers," Tompkins said. "From the junior Soldiers assisting in training to the senior NCOs building their teams and mentoring their subordinates, everyone had an integral part in this exercise. This was truly a great opportunity for me to spend quality time with my Soldiers away from any distractions."

HHC's stand-out Soldier during the exercise was Staff Sgt. Jason Molok. New to the HHC family, he served in both Operation Iraqi Freedom and and Operation Enduring Freedom, and his tactical experience really paid off. Molok compared notes with security personnel on how the Army conducts convoy security and compared the differences between the two services.

"I feel as though we all learned something and everyone benefited from working together, cross-service," Molok said.

After the exercise was completed, Molok was commended by the Air Force host unit commander for his active participation and for sharing his combat experience.

According to Staff Sgt. Nathan Daniell, the Operations NCO who is credited for coordinating all aspects of the exercise, said the exercise could be encompassed by one word, "Hooah!"



Photo by CW2 Anthony Kellar

Headquarters and Headquarters Company, 1st Satellite Control Battalion Soldiers train during a force protection exercise at Camp Gearnsey, Wyo.

# Training under water prepares astronaut for living in space

By Debra Valine Editor, *The Eagle* 

**HUNTSVILLE, Ala.** — Under the clear blue sea off the coast of the Florida Keys you can see all sorts of things: colorful tropical fish, barracuda, sting rays, sunken treasure ships and maybe astronauts.

Yes, astronauts. Underwater training is as close as astronauts can get to training in space.

Army astronaut Lt. Col. Doug Wheelock is the second Army astronaut to spend time in the Aquarius Habitat three miles off Key Largo and 62 feet underwater. Col. Jeff Williams participated in the training two years ago.

Aquarius, designed for marine science to study reefs, currents and effects of the population on sea life, is operated by the National Undersea Research Center out of



hoto courtesy of NAS

Lt. Col. Doug Wheelock was the lead coral scientist on the underwater training mission designed to simulate space. He is on an extravehicular activity with a coral science 'goodie baq.'

the University of North Carolina at Wilmington for the National Oceanic and Atmospheric Administration. It is similar in size to the living quarters on the International Space Station.

This training is important because it gives astronauts — or aquanauts as they are called under water — a chance to explore some of the issues they might encounter in an alien environment. It gives them a feel for what it is like to be on an extended space flight.

Training under water is just one of the events Wheelock hopes will some day land him a job as commander of the Space Station. Wheelock joined the astronaut corps in 1996, but has not yet flown on a space shuttle mission because the fleet was grounded after the Columbia accident.

The next phase of the West Point graduate's training will take him to Russia where he will be NASA's director of operations.

"I will be stationed in Star City, which is about 40 km (25 miles) northeast of Moscow," said Wheelock while in Huntsville attending the 7th Annual Space and Missile Defense Conference in August. "It is the Yuri Gagarin Cosmonaut Training Center — he was the first human to fly in space."

Wheelock, who will spend one year in Russia, had just completed the 10-day underwater training mission off the coast of the Florida Keys as a member of the NASA Extreme Environments Mission Operations (NEEMO) Team 6. For more information about the mission, visit the Web at: http://www.uncw.edu/aquarius/2004/07\_2004/expd.htm.

"They run several missions a year that allow us to go into saturation," Wheelock said. "If you are in regular SCUBA equipment, you can only go down for about 45 minutes. We go down and stay there. Once you go past your time limit you are OK as long as you do not surface. If you go to the surface, you'll encounter decompression problems which could lead to death. Our team motto for the mission was, 'the surface is not an option.'

"You are locked into the habitat like you would be either in space, on the lunar surface or on Mars. It is an alien landscape. What you have is the equipment you have with you and the training you have, sort of like what you would have on an exploration mission."

"NEEMO is not a simulation," said NEEMO 6 Mission Director Marc Reagan. "It's a real mission with real risks in a hazardous environment. If we're going to send humans back to the Moon and on to Mars, we're going to need economical ways to get our feet wet here on Earth.

"With NEEMO we have an analog of such high fidelity that we can field-test equipment and procedures before we try them in space," Reagan said. "On this mission we focused on exercise equipment, anti-microbial technology and



Photo courtesy of NAS

and Missile Defense Conference in Lt. Col. Doug Wheelock is refilling his air tanks in the 'pet August. "It is the Yuri Gagarin porch' area of the Aquarius habitat.

wireless tracking technology that is likely to be found on the Space Station in the near future."

NEEMO plays a part in the astronaut screening for spaceflight on the Space Station. It is one of the final training events where the astronauts are put into extreme environments.

"I've done cold weather training and some outdoor leadership training and things like that," Wheelock said. "And for the last two years, I've been working in Mission Control in Houston, Texas."

The NEEMO 6 team conducted seven different engineering experiments during the mission.

"We had trouble with all of them,"
Wheelock said. "The irony is that
everything worked perfectly in the lab
before we went down. Working through
the problems we had helped us with
teamwork, communication with ground
support teams, and the autonomy to make
changes necessary to make these
experiments work."

While learning about foreign environments is beneficial to all astronauts, it takes on special meaning for Wheelock.

"Since the Army was first in space, we want to stay on top of what NASA is doing. When we put the new NASA vision to work on the moon or Mars, the Army wants to be there.

"My personal objective for the Army is that when we finally set foot on the Moon again or on Mars, I would like that to be an Army boot," Wheelock said. "We are doing our part to keep the Army involved. We want to play a key role in securing the high ground."

# E Company prepares for severe weather on Okinawa

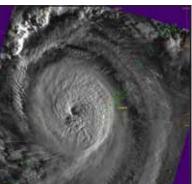
By 1st Lt. Eric Setzekorn Unit reporter

Between July and October the typhoons that form near the Philippines and in Micronesia travel with prevailing winds toward Okinawa.

Being in the typhoon alley presents several issues. Recently typhoon Songda made a direct course for Okinawa and gave E Company, 1st Satellite Control Battalion the opportunity to put its severe weather procedures into action.

For starters, large radomes are required to continue the mission during the high winds and large amounts of rain. Buildings are reinforced and largely made of concrete with fewer windows than in the United States. Large lockers

on site hold several days' worth of meals ready to eat (MREs) and boxes of batteries. Extra refrigerator space allows for easy food storage. During a normal typhoon shift one third of the unit is recalled to work during



A satellite image shows typhoon Songda moving over Okinawa and Echo Company, 1st Satellite Control Battalion.

the period of danger. For the next few days the operations building will be their home. Cots are spread in dark corners

> so whoever is not on shift can take a nap; games and books are popular diversions for those not working. A small shower area inside the building is available and often necessary in spite of the lack of hot water. No matter how many books or game systems

are brought, there is still an element of cabin fever that begins to take hold after about 48 hours. Luckily it's rare for a storm to last that long. Wind speeds exceeding 85 mph are common and even the most secured items can break free.

"I've been through a lot of typhoons after over two years on Okinawa, but it always amazes me when I see trees that are bent parallel to the ground by the wind gusts," said Sgt. Stuart Ransom.

The Japanese accept typhoons as a part of their environment and heavy emphasis is placed on preparation instead of evacuation of threatened areas.